DOCUMENT RESUME

ED 175 797	SO 012 106

AUTHOR	Safilios-Rothschild, Constantina
TITLE	Sex Role Socialization and Sex Discrimination: A Synthesis and Critique of the Literature.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	[illegible] 79
CONTRACT	NIE-C-74-0139
NOTE	160p.
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Access to Education; Achievement; Changing Attitudes; Developed Nations; Developing Nations; Elementary Secondary Education; Equal Education; *Females; Higher Education; Males; Occupational Aspiration; Occupational Mobility; Parent Influence; Role Perception; *Sex Discrimination; *Sex Role; *Sex Stereotypes; *Socialization

ABSTRACT

This report presents a synthesis and critique of approximately 850 books, research studies, and journal articles appearing between 1960 and 1978 on sex role socialization and sex discrimination. It also offers a number of hypotheses regarding the emergence, maintenance, and elimination of sex discrimination. This document is presented in six parts. Part I focuses on sex role socialization, with particular emphasis on sex typing of behaviors, women's achievement and motivation, and women's educational and vocational choices. Part II discusses cross-cultural patterns of sex role socialization in selected developed and developing nations including Greece, Sweden, England, The United States and Tunisia. Part III examines occupational and educational sex discrimination, with particular emphasis on race and sex discrimination against black women. Parts IV and V survey theory and research related to sex discrimination and sex stratification systems. The final part assesses changes in sex role stereotypes and identifies incongruities in men's and women's perceptions about values held by the opposite sex. Information is presented in essay form, with authors and dates of relevant research identified in parentheses after each major topic. A section of references concludes the document. (Author/DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED175797

Sex Role Socialization and Sex Discrimination: A Synthesis and Critique of the Literature

Constantina Safilios-Rothschild

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

U.S. Department of Health, Education, and Welfare
Patricia Roberts Harris, Secretary
Mary F. Berry, Assistant Secretary for Education

National Institute of Education
Michael Timpane, Acting Director

October 1979

SP 012 106

This project was conducted for the National Institute of Education, HEW, under contract number NIE-C-74-0139. The opinions expressed in this report do not necessarily reflect NIE position or policy, and no official endorsement by the National Institute of Education or the U.S. Department of Health, Education, and Welfare should be inferred.

NOTE TO READER

This publication is the final report from a study that the Women's Research Program of the National Institute of Education funded in 1974. The study had two phases, the first of which was the synthesis and critique of literature on sex role socialization and sex discrimination in education. The synthesis and critique was conducted in 1974-75 and selectively updated in 1978; it covers literature appearing between 1960 and 1978.

The second phase of the study consisted of the development of a theoretical model that could explain the emergence, maintenance, and elimination of sex discrimination for both developed and developing countries. The theoretical model will appear as a monograph sometime in 1980. Readers interested in receiving that monograph should contact Constantina Safilios-Rothschild, S-113 Henderson Human Development Building, Pennsylvania State University, University Park, PA 16802.

Other NIE publications on sex roles and sex role socialization include an extensive bibliography which was prepared by Dr. Safilios-Rothschild as part of her study, and a volume containing reports of six smaller scale research studies sponsored by the Women's Research Program. For ordering information on these two documents, please write to the Social Processes/Women's Research Team, National Institute of Education, Washington, DC 20208.

Susan Chipman
Assistant Director for Learning and Development
National Institute of Education

4

CONTENTS

Page

Note to Reader iii

PART I. SEX ROLE SOCIALIZATION 1
1. Sex Role Socialization and the Sex Typing of Behaviors. 3
2. Same-Sex and Cross-Sex Influences on Sex Role Socialization 21
3. Women's Achievement and Achievement Motivation 27
4. Women's Educational and Vocational Choices 43

PART II. CROSS-CULTURAL PATTERNS OF SEX ROLE SOCIALIZATION 55
5. Sex Role Socialization Patterns in Selected Societies 57

PART III. SEX DISCRIMINATION 63
6. Sex Discrimination in Primary, Secondary, and Higher Education 65
7. Occupational Sex Discrimination 85
8. The Case of Black Women: Race and Sex Discrimination 91

PART IV. SEX DISCRIMINATION: THEORY AND RESEARCH 95
9. Sex Discrimination: Theory and Research 97

PART V. SEX STRATIFICATION 113
10. Sex and Other Stratification Systems 115

PART VI. SEX ROLE STEREOTYPES DIE HARD 123
11. Sex Role Stereotypes: Are They Changing and How Much? 125

REFERENCES 131

Part I.

Sex Role Socialization

1. SEX ROLE SOCIALIZATION AND THE SEX TYPING OF BEHAVIORS[1]

Major Theoretical Approaches to Sex Role Development

The three major theoretical approaches to sex role development throughout the life cycle traditionally have been psychoanalysis, cognitive development, and social learning. The psychoanalytic approach is most commonly associated with Freud's biological deterministic interpretation of sex role development. He believed that the interaction of drive impulses and identification processes resulted in the development of sex-appropriate behaviors as males and females progressed through childhood. According to Firestone (1970), Freud's perspective reflects "centuries of increasing privatization of family life, its extreme subjugation of women, and the sex repressions and subsequent neuroses this caused" (p. 61). Although psychoanalytic approaches have not fostered a great deal of empirical research, distinctions based on biological or gender concepts continue to exert a strong influence on ideas about sex differences. Strict biological determinism should no longer be an issue because of concrete evidence as to the existence, both across cultures and within any given culture, of "crossing-over" behavioral dispositions of sex-typed traits by biologically "pure" males and females. Unfortunately, the idea that "anatomy is destiny" still influences the scientific community in regard to sex role development issues, especially sex differences in early infancy (Kagan, 1972).

Doing away with biological determinism does not eliminate biology as a potential influence on the development of the individual, including the development of some gender-related characteristics. Research in biology and in the social sciences has yielded more valid data when the emphasis is on the intricate nature of interactions between the biological-physiological factors and sociopsychological factors that lead to sex typing and sex role development. Although there is a tendency to view the sexes as dichotomous, a great deal of variation in biological factors exists within sex groups. Particularly in societies that maintain strict sex role divisions based on cultural stereotypes, secondary sex characteristics may become crucial factors that account for variations in growth and development within sex groups.

Cognitive development theory as it applies to the development of sex identity has been fostered primarily by Kohlberg (1966). Kohlberg's orientation, which is based heavily on the work of Piaget, incorporates two of Piaget's basic principles: (1) that children undergo specific, sequential stages of cognitive development in which they master principles about phenomena that remain constant throughout their lives (e.g., the conservation of matter) and (2) that children cannot be taught a given principle with any degree of permanence before they reach a particular stage of maturational development. Once children reach a certain stage of development, the principle becomes imprinted in their minds. This process is considered to be irreversible.

In applying Piaget's principles to the development of sex identity, Kohlberg argues that children reach a stage of cognitive development around age 7 that enables them to accurately label themselves as one sex or the other based on bodily images; this labeling is irreversible. Having made their decision, children then actively structure their experiences and seek out behaviors that they perceive as sex appropriate, based on the cultural images presented. Although some empirical support exists for this approach, the "real" perceptions of experimental subjects regarding sex-appropriate behavior cannot be manipulated without influencing the choice of these behaviors in overt actions. Assumptions about the sex appropriateness of behavior are easier to make in societies that are highly differentiated with regard to sex role norms and stereotypes. But because of variations between different groups within a society in how they maintain strict sex-differentiated roles and norms, the leap from perception to behavior has serious empirical restrictions. When sex role norms begin to loosen up and merge, the implications of a cognitive development view of sex identity become unclear. If transsexual operations were to increase in number so that sex was no longer viewed as an irreversible characteristic, what would this mean for the labeling process that supposedly accounts for sex-appropriate choices?

---

[1] An earlier draft of this chapter was written in collaboration with Robert Stein, Assistant Professor, Department of Sociology, Wayne State University, Detroit, Mich.

Although future technological innovation may make cognitive development theory as applied to sex roles obsolete, we should remember that belief in a "natural" division or differentiation between the sexes is heavily entrenched in most Western societies. Given this assumption, continued research with a cognitive development orientation may be useful in specifying ways in which different types of environments alter the perceptions and the structuring of behavior experienced by children.

In contrast to the intrapsychic processes that are crucial antecedent conditions in cognitive development theory, social learning theorists (Mischel, 1966; Bandura & Walters, 1963) emphasize the external environment and the role of socializing agents who shape the child through reinforcement. The differential reinforcement directed at the child according to her/his sex is seen as the major antecedent condition to sex-typed behaviors. Although the social learning approach assumes that imitation is important to learning, the sex of the model is not as important as the content of the reinforcement.

Too often the empirical research based on social learning wrongly assumes that parents and other significant socializing agents consistently adhere to sex role stereotypes in their own behavior and in the treatment of children. The process of reinforcement should not be viewed in such a simplistic way. Often the socializing agent (whether the mother or father) presents conflicting information; that is, the "sex appropriateness" of her/his own behavior may not meet the society's expectations for "sex-appropriate behavior" directed at girls and boys. Socializing agents may in fact differentially reward the same child for sex-typed behavior. Within the context of reinforcement, it is difficult to pinpoint or to empirically validate what constitutes a reward for girls and boys. Do different situations and different family environments serve as intervening variables that influence how reinforcement may account for the probability of a child's exhibiting sex-typed behavior?

A reinforcement model should be used with caution in post hoc explanations of sex differences and the sex typing of behavior. If a girl or boy exhibits behavioral traits that are not "sex appropriate," it can be argued that the child was reinforced for developing "sex-inappropriate behavior." Yet the power of reinforcement to change behavior from "sex inappropriate" to "sex appropriate" has not been substantiated empirically. In fact, when mistakes in labeling children are not discovered until after a number of years, attempts by socializing agents to change behavior by reinforcing "sex-appropriate behavior" fail in most cases (Lindesmith & Strauss, 1968).

The subtleties and variations in reinforcement need to be studied in much more detail. For example, reinforcement in the laboratory or experimental situation is often drastically different from reinforcement in real-life interaction. Also important is the degree to which sex-designated terms, such as "girl" and "boy," serve to reinforce a belief in the uniqueness of one sex compared with the other, besides the obvious physiological differences. Fagot (1974) found that even parents who exhibit some commitment to impartial treatment of their children often respond to them in a sex-differentiated way. The degree to which socializing agents unknowingly create cues that foster sex role differentiation is often underplayed and misunderstood.

In an attempt to clarify some of the dynamics involved in sex role differentiation, Lynn (1959) stressed the importance of three basic concepts: sex role preference, sex role adoption, and sex role identification. Sex role preference refers to desires for sex-appropriate behavior. Sex role adoption is the acting out of sex-specific behaviors; sex role identification becomes the internalization of this process and includes unconscious reaction to a sex-specific role. These distinctions have been fostered as important conceptual frameworks in both theory and research on sex role socialization; however, their empirical validation is limited because of measurement problems. Experiments that uncover processes to explain a belief in the "naturalness" of sex differences and that note the importance of sex distinctions as salient criteria for children may become crucial to the social learning approach.

Role Imitation or Modeling

Imitation, or modeling, is a crucial psychological process within the social learning approach (Bandura, 1965). This approach emphasizes characteristics of the actor and her or his environment that differentially affect the likelihood of given behaviors being exhibited. Learning is assumed to take place through imitation that is positively reinforced. A problem with this approach is how to define reinforcement as it is applied to given individuals in specific situations.

Despite a number of empirical studies, much debate and confusion exists about the role of the imitation process in the development of a sex identity and sex-typed behaviors in girls and boys.[2] Generally, boys displayed more imitative aggression than girls when the subject was not directly reinforced (Bandura et al., 1963a, 1963b; Hicks, 1965; Madsen, 1968). For behaviors other than aggression, either girls imitated more than boys or no measurable sex differences occurred (Fryrear & Thelen, 1969; Hetherington, 1965). Yet, some studies did not find any sex differences in the imitation process (Mischel & Liebert, 1966; Bandura & Mischel, 1965; Bandura & Kupers, 1964; Hetherington & Frankie, 1967; Breyer & May, 1970). Others indicated that sex differences tend to disappear when the child is rewarded for imitation (Bandura, 1965; Grusec & Brinker, 1972; McDavid, 1959; Stevenson, 1961).

One controversy focuses on whether the sex of the model is a crucial variable in imitation. Maccoby (1959) and others have argued that the female is the more salient model for young children, assuming that identification is first made with the mother. However, counterarguments claim that the father is the reality enforcer and that the male becomes a more salient model for young children (Rosenblith, 1959; Stevenson et al., 1963; Epstein & Leverant, 1963). The importance of the sex of the model may depend on whether the modeled behavior is sex appropriate or not. It has often been hypothesized that same-sex models are imitated much more often when they exhibit sex-appropriate behaviors. Although some studies suggest that children are more likely to imitate a same-sex model when the behavior is "sex appropriate" (Bandura et al., 1963a; Fryrear & Thelen, 1969; Maccoby & Wilson, 1957), other studies do not confirm this hypothesis (Rosenblith, 1959; Juran, 1971; Breyer & May, 1970; Bandura & Kupers, 1964). Garrett (1971) found imitation of same-sex models with regard to both appropriate and inappropriate sex-typed behaviors. Attempting to study imitation in a non-sex-typed situation, Garrett et al. (1974) found that same-sex imitation was most likely to occur in positive, nonthreatening situations. In somewhat threatening, negative situations, the combination of a male experimenter and a female model produced the most counterimitation in both sexes.

Two significant variables not always considered in studies of modeling are (1) the nature of the relationship between the child and the same-sex or opposite-sex model and (2) the type of affect that the child has toward the behavior being studied. Is a certain affective distance between parents and children more or less conducive to imitation? Are behaviors that are not displayed for the benefit of children but are a part of everyday living more conducive to imitation? Is it easier to learn what not to do, what to avoid and reject, than what to do? These are questions that must be thoroughly researched.

One basic problem in the design of most imitation studies is that they have not been constructed to test directly the influence of sex roles on the imitation process. Many of the findings, when taken collectively, suggest some patterns that would lead to hypotheses about imitation behavior but do not serve as direct evidence of any specific relationship. While this may partially account for the number of conflicting views currently held, it severely restricts the systematic formulation of generalizations about the role of imitation in the development of sex identity or sex-typed behaviors.

Too often, assumptions are made about the child's environment. Although this environment is outside of the experimental situation, it may influence the process under investigation. The imitation of a dominant model versus a passive model of either sex may in fact depend on the child's exposure to similar or different types of models within the home.

The behaviors used in imitation studies present two major problems. First, the degree to which the behavior implies "sex appropriateness" is not considered as a possible contaminant, or if it is considered as a possible contaminant, the design does not include appropriate controls. Second, many behaviors that appear to be sex neutral, such as marble dropping, do not have practical relevance in the everyday world of the child.

Many unknowns still exist about the imitation process and the extent to which it may be differentiated between boys and girls, different types of relationships and actors, and different types of modeled behaviors. Also, a parent may become a very powerful "negative" model by being very dissatisfied with her/his traditional sex role or by deviating from it.

Sex Role Preferences

Research on young children has focused extensively on the concept of sex role preference, which is inherently tied to traditional concepts of "masculinity" and "femininity" as stereotypically perceived by adults in a given culture. Studies have attempted to monitor children's sex role development and to test hypotheses regarding the theoretical importance of sex role preference for sex role adoption and sex role identification. Studies concerned with establishing the existence of sex role preferences of girls and boys have applied a variety of measures over the last 20 years. These measures include the IT Scale for Children (ITSC) developed by Brown (1956), a Toy Preference Test (TPT) suggested by DeLucia (1963), and Structured Doll Play (SDP) as used by Mussen and Distler (1959). In each of these methods, assumptions are made regarding the child's choice in a projective situation. In the ITSC, the child is presented with a presumably sex-neutral stick figure and asked to make a choice that has been prejudged as sex linked. In the TPT model, the child makes a choice for a hypothetical child whose sex is known. In the SDP study, dolls representing family members are used, and the child is asked to make choices for the dolls based on hypothetical situations. The major assumption for all three measures is that the choice the child makes represents a projection of her/his own sex role preference.

---

[2] For an excellent and extensive review of the literature on this subject, see Garrett et al. (1974).

Although serious criticism has justifiably been directed toward these measurements, many researchers continue to use them in attempts to determine how girls and boys differ in preference and variation scores, as well as in developmental aspects. Differences in the variation scores of girls and boys are thought to represent the strength of preferences and the amount of knowledge about the opposite sex's responses. Studies undertaken in the 1950's and 1960's found clear-cut differences in the preference scores of girls and boys, with girls having more "feminine" scores and boys having more "masculine" scores (Brown, 1956, 1957; Hartup & Zook, 1960; Lansky & McKay, 1963; DeLucia, 1963; Kagan, 1964; McCandless, 1967). Because older girls and boys show greater differences in the expected direction than younger children, some researchers claim that developmental trends are responsible (Brown, 1956, 1957; Hartup & Zook, 1960; DeLucia, 1963). Older children of both sexes are more likely to avoid inappropriate sex objects when faced with a sex-neutral undesirable alternative than are younger children of both sexes (Hartup et al., 1963). Conflicting results regarding variation in the sex role preference scores appear, with some researchers arguing for greater variation in girls' scores (Brown, 1956, 1957; Ward, 1968) and others arguing for greater variation in boys' scores (Hartup & Zook, 1960; Lansky & McKay, 1963). These latter findings are often used to suggest that male acquisition of "appropriate sex role preference" is less complicated (Hartup & Zook, 1960) and that boys show a stronger male preference compared with the female preference exhibited by girls (Biller & Borstelmann, 1967). Several studies have shown that girls learn the content of masculine sex-typed behaviors better than boys learn the content of feminine sex-typed behaviors (Schell & Silber, 1968; Reed & Asbjornsen, 1968). Also, when the IT stimulus is ambiguous, girls tend to perceive it as a male stimulus more often than boys tend to perceive it as a female stimulus (Schell & Silber, 1968; Hall & Keith, 1964; Sher & Lansky, 1968). All these findings can be interpreted as signifying that both girls and boys have a greater interest in "masculine" activities and behaviors because they are aware of the higher prestige and social desirability attached to males and "male" activities.

The interpretation of these findings has been seriously criticized and their comparability questioned. Schell and Silber (1968) criticized ITSC for insufficient representativeness of items and for marked variation in clarity of drawing "feminine" as compared with "masculine" items. They suggest that choices made by children might be based on a dimension in the test materials other than preferences for sex-typed activities and objects. By varying the instructions used with these types of measures, researchers have elicited differential responses from the same subjects. New studies were stimulated by criticisms suggesting that the IT figure is not ambiguous or sex neutral but contains primarily "masculine" cues (Brown, 1962; Sher & Lansky, 1968; Thompson & McCandless, 1970). Reed and Asbjornsen (1968) found that about half of the boys perceived the IT figure as male and about half as female, while most of the girls perceived the IT figure as female. In the same study, they found that in the most clearly defined "somebody figure," developed by Hogan (1957), the extreme female figure is perceived as male by 15 percent of the subjects. It appears that pre-school children lack the type of perceptual accuracy and consistency demonstrated by older children and adults on similar tasks.

Another factor that contaminates the meaning of choosing one toy over another is the degree to which children are familiar with the items used in the test. This familiarity may differentially affect their choices for reasons other than sex role preference. Perhaps the selection of toys has nothing to do with sex typing but represents some previous experience with the specific object independent of the experimental situation. Messer and Lewis (1972) were careful to point out the difficulty in assessing the significance of class differences in toy preferences without a careful study of the types and numbers of such toys found in the homes of children in each class group. The same argument can be used when comparing girls and boys on other dimensions.

That these measurement techniques represent an empirical basis for conclusions about sex role preference is debatable. Sher and Lansky (1968) claimed that the standard IT scale measurement is more appropriately used as a measure of sex role knowledge than of sex role preference. They suggest that the findings of Brown (1962), Hartup and Zook (1960), Hall and Keith (1964), Kohlberg and Zigler (1967), Lefkowitz (1962), and Reed and Asbjornsen (1968) support such a conclusion. This raises the question of whether it is meaningful to define the concept of sex role preferences in terms of cultural standards of "masculinity" and "femininity," as Brown (1962) suggested. A different approach, proposed by Lefkowitz (1962), was to define sex role preference in terms of some modal response in children of the same sex. In this way, sex role preference choices are rated on a same-sex continuum, the poles of which are deviance and nondeviance with respect to a given group of same-sex peers. Deviance in sex role preference is thus defined as divergence from the mode of same-sex preferences, but not necessarily in the direction of the mode of the opposite sex.

Asking subjects to make direct choices for themselves rather than for a figure or a hypothetical character tends to be a more complex and time-consuming procedure, but it probably is a more valid attempt to operationalize sex role preference as distinct from knowledge of sex role stereotypes. Using this procedure, Brown (1957) found that 72 percent of third grade girls preferred the IT figure to be a daddy, and thus he concluded that girls prefer the masculine role. However, Lefkowitz (1962) found that only 2 percent of girls indicated they would rather be a daddy when making a choice directly for themselves. Lefkowitz concluded that girls have about as much preference for the feminine role as boys have for the masculine role.

Utilizing a different technique, Hartley et al. (1962) showed that, when asked about a potential adoption, both boys and girls perceived adults as preferring children of their own sex. When the children were asked what sex they preferred for their own children, girls chose girls and boys chose boys. These authors urged serious questioning of the assumption that culturally enforced adult partiality for males is generally operating in children's sex role development. Liebert et al. (1971) found that children altered their choices of toys to conform with the indicated preferences of other children of their own sex; thus, adult stereotypes about toy choices and other behaviors may not have the same meaning to the child.

Studies dealing with sex role preferences in young children raise more questions than they answer. The use of different measures has led to questions regarding the ways in which the choices of young children can be altered. The choices offered to the child influence the social relevance, as well as the interpretation, of the findings. Sometimes toy choices involve one "feminine" and one "masculine" toy; sometimes both toys are considered "masculine" or "feminine" but differ in the degree to which they are seen as appropriate for a given sex. At other times, sex-inappropriate toys are matched with sex-neutral, undesirable objects.

All these studies indicate that children perceive the existing sex roles and that with age they increasingly differentiate these sex roles. What, if anything, these findings imply about sex role preference is unknown. Until standardized instruments are developed to measure interpretable behavior along a sex role preference dimension, questions will remain about the development of sex-appropriate behavior, avoidance of sex-inappropriate behavior, ease of learning appropriate sex roles, knowledge of adult norms regarding same-sex and opposite-sex roles, and the actual preference for one sex role over the other. If, in fact, children learn both sex roles, as defined by the adult culture, equally well, do they use this knowledge to avoid choosing the opposite-sex role behavior or to choose it, especially when it is considered more desirable? How might same-sex groups versus mixed-sex groups influence the degree to which sex roles are operating? Research using superficial designs that deal with one aspect of these issues creates a mass of statistical differences that are restricted in their usefulness. Although the use of previously designed techniques is methodologically sound, it does little to advance socialization theory and the understanding of sex role development in young children. This criticism has existed in the literature for many years, yet researchers continue to use these measures not just as a test of methodological issues but as if they have social relevance and practical significance in the understanding of the processes that lead to sex role differentiation.

Parents' Sex-Differentiated Behavior Toward Children

Studies of the role parents play in the development of their children have focused primarily on childrearing practices until the last 15 years; little emphasis has been placed on the development of sex roles per se. However, theoretical formulations that emphasize the role of the parent as either a model or reinforcing agent and empirical findings that suggest some differences between very young girls and boys have drawn more attention to the role of the parent as a socializing agent who actively participates in the sex role development of the child.

Many studies rely on interviews with the parent (usually the mother) regarding childrearing behaviors, or they observe mother-child pairs in an experimental setting rather than in a naturalistic one. Often, studies using only mothers make generalizations about both parents as if the father were merely an extension of the mother's childrearing effect on the child. When the father is seen as a crucial source of influence, independent of the mother, his role is often measured by asking the mother to report on it. In other cases, the child is asked for her/his perceptions of the father's, and often the mother's, role. Only rarely is the father's overt behavior observed.

Despite these shortcomings, the following differences have been reported with respect to parental treatment of boys and girls. Mothers and fathers verbalize to girls more often than to boys, especially in response to girls' vocalizations during the first 3 months of life (Lewis, 1972a; Moss, 1967; Moss et al., 1969). More proximal stimulation is given to boys, and more distal stimulation is given to girls (Lewis, 1972a). Boys also get more tactile-visual stimulation and are aroused to higher activity levels (Moss, 1967). After 6 months, girls are touched more, but boys receive less proximal stimulation. Throughout the first 6 months, mothers talk to girls more than to boys (Goldberg & Lewis, 1969). Mothers maintain physically close and affectionate relationships with girls for a longer period than with boys (Lewis, 1972a). Mothers also expect girls to be more dependent and they give girls more physical attention (Droppleman & Schaefer, 1963). Boys are given more independence training (Barry et al., 1957), more punishment (Droppleman & Schaefer, 1963), and more intellectual encouragement (Lynn & Sawrey, 1962). For pre-school children, mothers pressure boys more to achieve and punish them more for showing dependency. Boys' aggression is rewarded as appropriate "masculine" behavior, but girls' aggression is never rewarded, though indirect expressions are tolerated. The pressure on girls is for "feminine" qualities, such as neatness, obedience, and conformity, but pressure on boys is for independence and achievement (Hatfield et al., 1967). Mothers of girls control verbal protests by withdrawing love, but mothers of boys use negative sanctions (deprivation of privileges) to control verbal protests (Baumrind & Black, 1967).

These findings do not clearly prove that differential parental treatment accounts for sex differences, but they are crucial in refuting the widely held assumption that children are treated identically, especially when they are very young. The differential treatment of infants raises important questions about how parental behaviors might systematically influence the development and growth of children in a sex-differentiated way.

Although few data exist on fathering (Begner, 1970), the probable influence of the father on the socialization of children, especially of sons, is often mentioned. Two studies suggest that the negative effect of father dominance accounts for low self-concept in boys (Coopersmith, 1967; Sears, 1970). In the Coopersmith study, the behavior of the father was measured on the basis of ratings made by the son; in the Sears study, the father's behavior was measured on the basis of ratings by his wife. The behavior of the father might also influence intellectual functioning in young boys (Blanchard & Biller, 1971; Dyk & Witkin, 1965; Grunebaum et al., 1962). However, in each of the studies cited, the father-son interactions were not observed. In an observational study, Solomon and associates (1973) found no significant correlations between paternal behavior and the academic achievement of fifth grade boys. However, a finding of significant correlation between the nurturant behavior of fathers and the IQ of 4-year-olds led Radin (1972) to suggest that the role of the father may be crucial for this group.

The role of the father as separate from the mother may have an independent effect on the sex role development of both girls and boys. Although there is not a great deal of evidence, some empirical findings suggest that mothers and fathers treat boys and girls differently (Maccoby & Feldman, 1972; Rothbart & Maccoby, 1966; Rebelsky & Hanks, 1971). With regard to autonomy behaviors, Nakamura and Rogers (1969) showed that mothers' and fathers' expectations differentially predict sons' and daughters' behaviors. In an observational study, Osofsky and O'Connell (1972) reported that fathers positively reinforced dependent daughters and that mothers exerted more control over dependent daughters. These findings, along with those of Brim (1957) and Emmerich (1962), suggest that sex of parent and sex of child are crucial variables in research designs attempting to account for the processes affecting sex role development in children. Contradicting the studies mentioned above, Emmerich and Smoller (1964) reported a consistent lack of evidence for sex role differentiation based on sex of parent and sex of child and suggested that siblings and peers, rather than adults, serve as a basic source of sex-typed norms during early childhood.

The conflicting findings reported above may be the result of simplistic research designs that allow intervening variables to confound the findings. Using a more complex design, Torgoff (1967) showed that, when looking at achievement-inducing and independence-granting behaviors, the family structure affects the role the parent plays as a model. More specifically, the number of siblings, the sex of siblings, and the order (male first/female first) systematically create different environments for parental input. Thus, generalizations are restricted not only when the mother is the sole source of data but also when the family structure itself becomes a variable. Not only do parent-child interactions seem to be affected by the gender characteristics of the actors, but resulting patterns seem heavily influenced by the gender characteristics of other children in the family and their birth order (Torgoff, 1967).

Increasingly, the role of both mothers and fathers has been recognized as influential in the sex role development of boys and girls. Research has pinpointed the omission of important variables. These omissions contaminate the meaningfulness of the conclusions and render them useless as empirical evidence to support theoretical formulations. Problems in observational research include small sample sizes, lack of attempts to replicate findings, social pressure that causes parents to alter their behavior for the experimenter, and, more importantly, lack of attempts to integrate findings and conceptual schemes to give some direction to studies in this area. Having established the parent as a crucial source of variation, researchers should not jump to conclusions about the importance of this factor in shaping the sex role identity of the child. Too often, researchers assume that the influence is only in one direction, from parent to child. A more complex design, removed from unidimensional effects, involves a circular system in which parents affect children and children affect parents (Moss, 1967; Osofsky & O'Connell, 1972; Richards & Bernal, 1972). Based on this perspective, it is unclear whether differential responses to parents' behaviors influence parents to respond differentially to boys and girls or whether some mothers and fathers have preconceived notions that result in differential treatment of boys and girls regardless of the child's responses. Bell (1968) and Moss et al. (1969) demonstrated that children influence parents as much as parents influence children. Most probably, the nature of interaction between children's and parents' sex-differentiated behaviors makes it difficult to assess the relative influence of one set of behaviors on the other. Perhaps it can be assumed that, during the first year of an infant's life, the parents' preconceived sex role notions and sex-differentiated behaviors are often more important than the child's behaviors and that increasingly the child's sex-differentiated behaviors tend to confirm, reinforce, and stimulate parental sex-differentiated behaviors.

In most sex role socialization studies, the values, characteristics, and achievements of parents have not been studied as important variables that influence the extent to which parents treat boys and girls differently or present girls and boys with different types of sex role messages and models. At least some mothers and fathers may hold nonstereotyped sex role attitudes and display some sex-inappropriate abilities, achievements, or behaviors. With the exception of maternal employment, we know little about the socializing effect of parents' sex-inappropriate abilities, traits, and behaviors, especially as they are colored by the parents' and others' feelings and reactions.

Katkovsky et al. (1964) differentiated the socialization roles played by parents, especially with respect to sex-appropriate and sex-inappropriate behaviors. Their purpose was to examine the relationship between the achievement attitudes, values, and behaviors of parents regarding their own achievements on specific dimensions and the achievement attitudes, values, and behaviors that parents exhibited regarding their children's achievements on the same dimensions. Achievement areas studied were intellectual attainment, mechanical skills, physical skills, and artistic attainment. The general findings showed an expected correspondence between parents' achievement values for themselves and the achievement values they want to pass on to their children; however, important variations appeared according to the sex appropriateness of the achievement dimension in question and the child's gender. Mothers who valued mechanical ability for themselves did not encourage this ability in daughters or sons. Fathers who valued mechanical ability tended to value it more for daughters than for sons. Fathers who valued artistic ability for themselves tended to also value it for their sons more than their daughters (Katkovsky et al., 1964). Thus, the correspondence of achievement values seems also to hold true between parents and children of the opposite sex and with respect to sex-inappropriate achievements. Dissatisfaction with a specific skill that was sex appropriate (father—physical skill/mother—artistic ability) tended to influence parents to encourage development of this skill in their sons, more so than when there was satisfaction with the skill.

Parents who have sex-inappropriate abilities and achievements may serve as positive models for same-sex children, unless they also transmit negative messages about these abilities and achievements. Thus, they may become powerful negative models, for example, mothers who are dissatisfied with the housewife role (Lipman-Blumen, 1972).

Birth Order and Sibling Status

Examination of birth order and sibling status provides insights into whether children in various sibling constellations are exposed to different sex role pressures and expectations, as well as to different parental and sibling sex role models. Birth order and sibling status, though not always linked in the literature, are inherently tied together in a sex role perspective. Concern with birth order differences but not sibling status disregards gender as a crucial variable.

Although birth order and sibling status have been studied extensively, the findings are ambiguous and, therefore, add little to theoretical formulations (Sampson, 1965; Warren, 1966; Rosenfeld, 1966; Murdock & Smith, 1969; Bragg & Allen, 1970). Birth order and sibling status are related to many other variables that may influence patterned social behavior such as family size, spacing between children, sex ratio of siblings, and characteristics of the socializing agent. Most often, these relevant variables are ignored in research designs. They should be studied using sophisticated methodology because they indicate the structural variation in sibling and parent-child relationships, and thus have important implications for sex role socialization.

Birth order and sibling status studies have focused on different dependent variables, including motives (Dember, 1964); emotional disorders (Schooler, 1964); personality characteristics (McArthur, 1956); vocational preference and expectation (Mehta & Juneja, 1969); preference for complexity versus simplicity (Eisenman, 1967); and sports participation and interests (Landers, 1970). Research relevant to sex typing has focused on conformity, dependency, anxiety, and affiliative behavior.

Schachter (1959), performing anxiety affiliation experiments on females, found that in stress situations first-born females prefer to be with others rather than alone more often than later born females. This finding was then generalized to both sexes with respect to expected differences in dependency behavior. It was suggested that parents (especially mothers) spend more time with first-born children and that, out of inexperience or insecurity, they are likely to "overparent" the child, thus encouraging dependency. Later born children are less likely to receive the same degree of "overparenting" and are therefore less likely to express the same degree of dependency. This generalization of research findings from girls to boys can be found in some research conducted in the 1950's and 1960's. This type of generalization is inappropriate because it assumes that boys and girls are treated alike by parents and because dependency is a sex-typed behavior expected from girls but not from boys. Not surprisingly, subsequent research has shown that the differences found between first-born and later born females on anxiety and affiliative behavior are not found for males; in fact, some studies found that later born males showed more anxiety and dependency than first-born males (Gerard & Rabbie, 1961; Zimbardo & Formica, 1963; MacDonald, 1968; Zucker et al., 1968).

MacDonald (1969) formulated a socialization hypothesis to reconcile these differences reported in empirical studies and to reformulate the understanding of birth order and sibling status as potential sources of influence on social behavior. According to his socialization hypothesis, first-born children are more thoroughly socialized than later born children, and therefore are more susceptible to the socialization practices of the parents. In addition, the hypothesis assumes that parents socialize the sexes differentially, especially with respect to sex-typed behaviors. The concept of parents socializing children differentially based on the sex of the child does not, however, take account of differentials according to the sex of the parent. Thus, within the socialization hypothesis as developed by MacDonald, both parents are seen as fostering the same stand with respect to sex-typed behaviors. Based on these assumptions, MacDonald (1969) argued that first-born children, in contrast to later born children, feel more pressure to conform to the expectations of adults or authority figures. To the extent that parents socialize children differentially with respect to their sex, sex differences between first-born children may be explainable if the behavior under consideration is sex typed. Explicitly with regard to dependency behavior, it can be argued that, according to cultural standards, it is considered more "feminine" than "masculine" to express dependency. Through the socialization hypothesis, MacDonald attempts to allow for sex differences between first-born children and for the interaction of sex and birth order in the examination of patterned behavior.

Support for the socialization hypothesis is not conclusive, though it has served as a basis for deciding how crucial sex role socialization is to understanding and predicting behavior patterns of boys and girls. The socialization hypothesis compels researchers to determine how much behavior is sex typed and what effects sex typing may have on the results of the experiment. MacDonald (1969) reported sex differences consistent with the socialization hypothesis between first-born and later born adults with respect to withdrawing from an experiment. In an attempt to replicate these relationships in a study of kindergarten children, Laosa and Brophy (1970), using measures of creativity and sex-typed interests, intellectual ability patterns, and peer relations during free play, hypothesized that first-born boys and girls differ from each other to a greater degree than later born boys and girls on variables related to sex typing. The results of this experiment suggest that MacDonald's hypothesis fits fairly well, although the consistency and intensity of birth order effects are more notable in girls than in boys. In attempting to replicate and expand these findings using more extensive measures, Laosa and Brophy (1972), again using middle-class urban kindergarten children, found that direct measures of sex typing consistently negate predictions from MacDonald's hypothesis.

The failure of findings to support MacDonald's socialization hypothesis led Laosa and Brophy (1972) to conclude that the two major influences of MacDonald's hypothesis, more thorough socialization of first-born children and differential socialization based on sex of child, do not interact in any simple linear fashion. Thus, a sex-by-birth order interaction may be tenable for some measures but not for others, and therefore MacDonald's socialization hypothesis should be modified.

Because of the lack of consistent birth order differences, the results of the Laosa and Brophy (1972) experiment were reinterpreted within the context of Kohlberg's (1966) cognitive development theory. According to Kohlberg, sex typing comes about largely through cognitive development (a labeling process), rather than through identification processes or direct reinforcement for sex-typed behavior. Within this context, no birth order difference on direct measures of sex typing would be expected. To the extent that the child has internalized the appropriate sex label, birth order differences should not occur for children of the same sex. Consequently, sex differences across ordinal position should be maintained. Birth order-by-sex interactions would be expected only when variables are indirectly related to sex typing. Although Laosa and Brophy (1972) were not testing Kohlberg's theory, their findings can be explained better by Kohlberg's theory than by the socialization hypothesis of MacDonald.

How birth order and sibling status systematically influence the behavioral response of the child rests on certain assumptions about the child's sex role socialization. These assumptions need to be tested empirically. The emphasis on the differential socialization of boys versus girls is assumed in MacDonald's (1969) socialization hypothesis and in the reformulation of this hypothesis within cognitive development theory as suggested by Laosa and Brophy (1972). In the first orientation, differential reinforcement by parents is a crucial antecedent condition that accounts for the differential response of girls versus boys and for the potential interaction effects of sex by birth order. In the second orientation, differential reinforcement by parents is seen as reflecting prevailing sex role stereotypes that designate characteristics and behaviors as either sex appropriate or sex inappropriate. However, the degree to which parents actually serve as differential reinforcers of sex role stereotypes (much less the degree to which both parents socialize in the same way) is often assumed rather than empirically verified. Researchers tend to designate parents' behaviors and ideologies as crucial and yet to assume little variation among them.

That children undergo changes in the transition from childhood to adulthood is taken for granted. However, the assumption of adult status does not suddenly mean that all changes come to a halt. In fact, Benedek (1959) suggested that as children change, parents may change too. Lansky (1964) directed attention toward the parents' attitudes and behavior as potential sources of variation, which in turn may differentially affect the behavior of the child. Using measures that have traditionally been employed with children, such as the Gough Scale (Gough, 1952) and the Franck Drawing Completion Test (Franck & Rosen, 1949), Lansky (1964) set out to determine how parents may differ in sex role identification in different family structures. Specifically, Lansky varied the sibling configuration (same-sex versus mixed-sex siblings) and the age of a preschool child in the home. Although the masculinity-femininity patterns of mothers and fathers were similar in different family structures, there were different correlational patterns between masculinity-femininity scores of parents from different family structures with children of differing ages. Lansky suggested that parents differ in their sex role identifications and that changes in one or both parents may take place over time. Thus, not only may children in different family structures have different models from which to develop their sex roles, but parents may change as the structure of the family changes. Parents cannot be conceptualized as monolithic sex role socializing agents.

Lansky (1967), continuing to study parents as a source of variation, shifted attention from masculinity-femininity measures to parental attitudes toward children's sex role choices. A Sex Role Attitude Test (SRAT) derived from the children's form of the SRAT described by McKay (1964) was used to measure parental attitudes. Again, Lansky concluded that parents should be conceptualized as a source of variation because their attitudes differed according to family structure. In general, parents of boys had more polarized attitudes, and fathers of mixed-sex siblings differed from one another more than mothers of mixed-sex siblings.

Family structure (affected by family size and sibling configuration) influences the responses of the parents, which in turn may influence the sex role development and behavior of the child (Rosenberg & Sutton-Smith, 1971). Rosenberg and Sutton-Smith (1968, 1971) found that fathers' scores were more "masculine" when they had only daughters than when they had a daughter and a son. In addition, fathers' scores were more "feminine" when they had sons than when they had daughters. In both these studies, fathers' scores varied as a function of sibling configuration but mothers' scores did not. In other studies, Rosenberg and Sutton-Smith (1964, 1966, 1971) found that daughters' sex role attitudes were more affected by family members, while the sons' attitudes were more affected by sex role standards prevailing outside the home. The results led Rosenberg and Sutton-Smith, as well as others, to severely criticize research on sex role development in the family that deals only with the child's response or with sibling effects on each other. Research that does not examine the family structure may well be only an abstraction of the more complete phenomena in operation. Family structure and, more specifically, the gender composition of children seem to affect the nature of the operating sex role norms and processes during sex role socialization.

In an attempt to clarify some theoretical foundations, Bragg and Allen (1970) specified two general assumptions about the relationship between ordinal position and conformity in a role theory perspective. First, Bragg and Allen suggested that first-born and later born children undergo a different process of socialization. Specifically, peers are considered more salient stimuli for later born children, and adults appear to be more salient stimuli for first-born children. Second, Bragg and Allen also attempted to build situational determinants into their basic assumptions; i.e., the more closely the cues in a situation resemble the family situation in which the subject learned her/his sex role behaviors, the more likely the subject will be to show appropriate sex role behavior. These two assumptions allow for a number of new and testable hypotheses based on a comprehensive analytical framework. For instance, in the experiment by Bragg and Allen, pressure for conformity is defined as coming from same-sex peers. Under this condition, they argued, the sex of the subject will produce differential conformity for later born but not first-born subjects. Differential degrees of conformity in later born subjects would be based on the sex of the older sibling. According to their theory, whoever is more salient at the time an individual learns her/his sex role will serve as the situational cue in experimental situations to account for variations in social behavior. If the older sibling is of the opposite sex, conformity to sex-appropriate behavior should be strongest in later born children when pressure for conformity comes from opposite-sex peers rather than from same-sex peers or from adults.

Although this theoretical perspective helps to establish the importance of ordinal position, sex of subject, sex of sibling, and characteristics of the influence source in predicting sex-typed behaviors, it still makes assumptions about how subjects are socialized in a traditional sex role framework. The approach discards the simplistic assumption that a consistent and invariant pattern of conformity behavior will always be exhibited as a function of a specified ordinal position. Using a more sophisticated approach, researchers can stipulate other important variables, but they still make assumptions about sex appropriateness based on traditional standards and images that most "normal" children come to know under similar socialization influences.

Brim (1958) also utilized a role theory perspective in attempting to account for variation in sex role learning based on differential sibling configurations. The basic hypothesis, which was originally suggested by Cottrell (1942), was that interaction between two persons leads to assimilation of roles. This suggests that opposite-sex siblings are more likely than same-sex siblings to incorporate traits of the other sex. In addition, Brim argued that younger siblings are influenced more by this process than are older siblings, because the latter have had more time to establish their own role. In reanalyzing data supplied by Koch (1956), Brim found support for these hypotheses. He did not consider how parents influence these differential effects. The basic premise of assimilation of roles has implications for the child's interaction with parents of both sexes, as well as her or his interaction with siblings.

A methodological note relevant to birth order and sibling status studies concerns sampling bias. MacDonald (1969) reported that later born subjects may be underrepresented in study samples because they are less likely to volunteer and more likely to miss their appointments. Based on this finding, MacDonald suggested that, in experiments dealing with variables related to birth order, samples should be inspected for birth order bias. Few studies in which birth order is not the central focus appear to adjust for possible birth order bias.

The sex ratio of children in the family, as well as their birth order, seems to affect the sex role norms and socialization processes of these children. Sex ratio seems to be a significant structural variable in sex role socialization whether at home, in school, or with regard to peer influences. Same-sex and mixed-sex settings and interactions seem to have very different sex role implications.

Father Absence as a Test of Identification and Modeling Theories

The absence of the father is considered to have serious consequences, especially for sons left without a substitute male model. Many empirical studies, done over the last 30 years, have provided very little conclusive information about father absence. Some research completely disregards the importance of sex roles as a theoretical perspective and looks at the general effects of father absence on boys and girls combined (Tiller, 1958). However, most research gives lip service to sex roles and looks at the differential effects of father absence on boys and girls.[3]

The findings of father-absent studies have not been conclusive mainly because of methodological problems and theoretical biases. A serious methodological problem concerns the ambiguous definitions of the terms "father absence" and "father presence." Some studies have lumped together families in which the father is completely removed (e.g., by death or desertion) with families in which the father is absent but still maintains a relationship with his children (as is often the case in divorce). Other studies have compared children from families in which the father was absent for 2 or more years with all types of two-parent families regardless of the degree to which the fathers were regularly absent for more or less long periods of time.

The measurement of sex role preference, sex role adoption, and sex role orientation can also be criticized on methodological grounds. To some extent these concepts are based on a sex-differentiated culture in which gender is confused with sex role, that is, with "masculinity" and "femininity." Whether an individual has a male or female gender identity is different from whether s/he adopts "masculine" or "feminine" preferences, choices, or behaviors. To the extent that societies allow for changes in sex role norms or overlapping of sex roles, measurements based on "masculinity" and "femininity" lose their meaning. It is here that the theoretical (and ideological) bias becomes important: Within the framework of identification theory and from a traditional view of sex typing, "masculinity" and "femininity" are considered bipolar concepts. Furthermore, the development of boys as appropriately "masculine" and the development of girls as appropriately "feminine" have been assumed as essential for the "healthy" social and psychological development of children (Biller & Borstelmann, 1967) and for the "healthy" functioning of society. Many of the negative consequences of father absence need reexamination and reinterpretation in light of recent theoretical and empirical developments concerning androgyny and the accumulating evidence of the "positive" implications of androgyny for creativity, self-esteem, and social adjustment (Bem, 1972, 1974; Spence et al., 1975).

The limited generalizability of findings due to the lack of appropriate controls is another serious methodological shortcoming. Even essential variables such as social class, length of father absence, age of child when father absence began, availability of substitute male models, type of father absence (temporary, intermittent, or permanent), and reasons for father absence are not controlled, and therefore conclusions are not meaningful (Herzog & Sudia, 1968, 1969).

Another methodological difficulty results from the sole use of mother-child pairs in studies of parent-child interaction in which sex role socialization is of primary importance. This assumes that the mother plays the crucial child-rearing role, that the father complements or reinforces the situation created by the mother, and that by his very existence the father serves as a model for his male children. That the father may differentially affect the sex role socialization of his children is often overlooked. Therefore, no solid comparative data exist on the role of fathers in children's sex role socialization and development. When the father is absent, however, his absence probably attracts more research interest than it deserves. We probably cannot effectively study father absence because we have not yet effectively studied father presence. Assigning validity to identification theories based on father absence studies is a problem, although it is implied that if boys in father-absent homes can be shown to differ significantly from boys in father-present homes (in "appropriate sex role development"), then the position and importance of the father will be firmly established.

---

[3] For an excellent review of the literature on father absence and the personality development of the male child, see Biller (1970). See Biller and Weiss (1970) for a study of the effect of father absence on the female child.

Because father absence studies assume that an incomplete family structure is inherently pathologic and pathogenic, they focus on the "harmful" effects on boys' socialization and development, including sex role development. Research has concentrated on "masculine" sex role development, aggression, intellectual deficits, difficulties in interpersonal relationships, anxiety, overall dysfunctioning, and homosexuality (Biller, 1970). This research assumes that the importance of the male model for the boy is verified to the extent that father absence (lack of a same-sex role model) affects the expression of an appropriate masculine image.

The designs of many studies have been influenced by the conceptualization of sex role development in three major areas: sex role preference, sex role adoption, and sex role identification (or orientation) (Lynn, 1959). These distinctions are crucial because they (1) involve different types of measurement, (2) may explain conflicting empirical findings, and (3) have different implications for theoretical formulations. Sex role preference is usually measured by children's expressed likes and dislikes of toys, games, and activities assumed to be sex typed. Sex role adoption is measured by observers' ratings along bipolar masculine-feminine dimensions. Sex role orientation (or identification) is usually measured indirectly by responses to projective tests and by fantasy play.

The term "compensatory masculinity" (Lynn & Sawrey, 1959; Barclay & Cusumano, 1967) came about because there were no consistent differences between father-absent and father-present boys on all three of these sex role dimensions. Since the investigators would not acknowledge the possibility that boys in father-absent families could be as masculine as boys in father-present families, a new label was coined to imply some kind of "abnormal" adjustment to a deviant situation.

To the extent that sex role preference and adoption are measured directly, they are subject to social pressures and norms regarding sex roles and may merely reflect the degree to which the child has learned to conform to the norms of society. Sex role identification (or orientation), however, is seen as a much more covert process, which supposedly taps the individual's "conscious or unconscious perception and evaluation of his maleness and/or femaleness," and therefore is considered a more crucial test of how much the male child is seriously restricted, due to father absence, in the development of his sex identity (Biller, 1970). Consequently, some designs have attempted to incorporate more than one dimension of sex role development in order to study compensatory masculinity in father-absent boys and to get a better grasp of how father absence affects different aspects of sex role development (D'Andrade, 1962; Barclay & Cusumano, 1967; Biller, 1968; Greenstein, 1966; McCord et al., 1962; Miller, 1961; Mitchell & Wilson, 1967).

How are other variables affected, and how do they, in turn, intervene either to dilute or to increase the negative impact of father absence on male socialization? Variables such as sibling influence, substitute masculine models (including peers, TV, male relatives), and changes in the mother's behavior have been studied (Sutton-Smith et al., 1968; Nash, 1965; Biller, 1969). These studies begin to raise questions about how father absence can directly affect the development of boys.

Although the major area of interest in the father absence literature has been the effect of father absence on the socialization of boys into adult sex roles, some studies have systematically looked at how father absence differentially or separately affects the socialization of girls (Lynn & Sawrey, 1959; Sutton-Smith et al., 1968; Biller & Weiss, 1970).

Furthermore, mother absence, though obviously existing to a much smaller degree than father absence, has not fostered empirical studies. At least for some designs, the likely comparison group for father-absent subjects would seem to be a matched sample of mother-absent subjects.

Biller (1970) postulated that most statements in this area of empirical research are hypotheses rather than conclusions and deserve more systematic research. Despite the tentativeness of his findings, Biller conveyed the impression that the following statements are derived from studies that have already been done:

- Although girls are less affected by father absence than boys, girls' personality development may also be adversely affected by it.
- Father absence for the child also means husband absence for the

mother and is likely to influence her behavior toward the children.

- Peer influence, sibling influence, and surrogate male models are intervening variables that may serve to mitigate the negative impact of father absence.
- Because of "compensatory masculinity," father-absent boys may appear similar to father-present boys in sex role preference and sex role adoption.
- Father-absent boys may be significantly different from father-present boys in sex role orientation.

Father absence and mother absence cannot be thoroughly studied and understood until conceptualizations and research designs are freed of many theoretical biases and methodological problems, and until sex role socializing by fathers, both with mothers and separately, is thoroughly studied. Under what conditions do same-sex and opposite-sex interactions affect what aspects of sex role development by what processes? Most probably, father absence is of little importance by itself; other variables determine its impact on sex role development.

Sex Differences in Early Infancy

Research on sex differences in early infancy has focused primarily on cognitive processes, attachment behaviors, toy preferences, activity levels, and responses to stressful situations.[4]

Focusing on cognitive development, Kagan (1972) saw the female during early childhood as being more advanced in the dimensions of vocalization (Lewis, 1969), discrimination between stimulus situations (Lewis & Freedle, 1972; Lewis, 1969), and preference for complex stimuli (Kagan & Lewis, 1965). The meaning of such differences is open to interpretation, though some theorists argue for a biological basis (Kagan, 1972; Kagan & Moss, 1962; Maccoby & Jacklin, 1973). Levison (1972) argued that biological explanations of early sex differences are maintained because they provide "scientific" justifications for women's inferior position in the sex stratification system. Or girls simply may be responding to greater stimulation in terms of vocalizations they receive from both parents.

Sex differences in other areas are often not clear-cut in the literature on infancy.[5] For example, some research on attachment or dependent behavior reports greater attachment behavior in girls (Goldberg & Lewis, 1969; Messer & Lewis, 1972; Brooks & Lewis, 1973; Spelke et al., 1973), but other research fails to find sex differences in attachment (Rheingold & Eckerman, 1969; Coates et al., 1972a, 1972b; Lewis & Weinraub, 1973; Maccoby & Jacklin, 1973; Ainsworth & Bell, 1970; Ainsworth et al., 1971). The reasons for contradictory findings are not clear, but they may be related to one of many methodological problems to be discussed more fully below. Maccoby's (1971) attempt to replicate Goldberg and Lewis' (1969) procedures resulted in different findings: a lack of sex differences but a great deal of variability within sexes. Levison (1972) suggested that the existence of rejecting parents for 16 percent of the girls in the Goldberg and Lewis study (1969) may explain the greater attachment behavior reported for girls.

Toy preference studies, although significant for children in later stages of development, show no strong sex differences for children at approximately 1 year of age (Messer & Lewis, 1972; Brooks & Lewis, 1973; Goldberg & Lewis, 1969). The only preference differences that emerge are the preference of boys for large mechanical objects (Bronson, 1971; Jacklin et al., 1973) and of girls for stuffed animals (Goldberg & Lewis, 1969; Bronson, 1971). This finding was not replicated by Jacklin et al. (1973).

Activity levels of 1-year-old, middle-class children show no marked sex differences (Goldberg & Lewis, 1969). Messer and Lewis (1972) suggested that there might be a social class difference; they found that lower class girls crossed significantly more lines drawn across a room than did lower class boys.

The final area of studies focused on reaction to stress-induced situations. Stress was induced by setting up a barrier between mother and child (Goldberg & Lewis, 1969), presenting a loud taped male voice (Maccoby & Jacklin, 1973), or having the mother leave for a short time (Coates et al., 1972a, 1972b). Again, for 1-year-old children no clear-cut sex differences in the amount of resourcefulness were shown.

---

[4] This review of sex differences is not exhaustive or comprehensive. The articulation of a theoretical model of sex role socialization and sex discrimination guided the synthesis of the literature presented.

[5] For a comprehensive review, see Maccoby and Jacklin (1974a).

Lack of consistent empirical designs and the use of nonstandardized procedures for measuring variables merely add to the confusion concerning the validity of differences in the data. The use of raters, who themselves have sex role stereotypes and expectations with regard to differential behavioral dispositions, is an additional source of error. The failure to replicate findings across studies raises questions as to the degree to which underlying differences can be presumed to exist. From the perspective of an interaction setting, the behavior of the infant is often observed as if it represents some underlying predisposition created either biologically or by antecedent conditions existing in the socialization practices which take place prior to experimentation. Research of this nature is always done with the mother present; thus, the mother herself becomes a source of variation and potential influence on the infant's response. The crucial question that remains unanswered in these designs is: How much do differences in infants in experimental settings represent differential treatment by mothers of boys and girls in the research setting itself?

To what extent can reported sex differences be generalized to boys and girls in different social classes and ethnic groups? Most of the studies used children of white upper middle class parents or of professionals from an urban university community. Lewis and Weinraub (1974) pointed out that studies of attachment behavior using lower class and middle-class subjects have generally reported higher attachment behavior in females, but that studies using upper middle class subjects have reported no differences. The generalizability of findings across class lines is, therefore, questionable. We know even less about the extent of their generalizability across racial and ethnic lines.

So far, only basic behavioral differences observed during infancy have been presented in these studies, utilizing sex as a crucial independent variable. A great deal of variability exists both within and across sex for the variables investigated. The major stable differences reported relate explicitly to cognitive processes, which show the female to be more advanced than the male. Other variables tend to diverge depending on the specific subjects and design utilized. From a research point of view, the significance of such findings is limited. Other variables, such as parental influences on the socialization of children (which will be reviewed later), provide some insight into differential responses in infants.

An extensive study by Pedersen and Bell (1970), based on group observations of 2½-year-old children, reported sex differences that go beyond those reported earlier for cognitive processes. In this study, boys were more aggressive and had greater activity levels, and girls were more likely to imitate a female model. No differences between the sexes were found in resourcefulness or persistence in overcoming obstacles. Although more studies are needed to determine the stability of such differences across experimental samples, the suggestion of such differences at this early age creates a bridge for the appearance of other differences at the next stage in the life cycle.

Sex Differences After Infancy: Some Developmental Issues

After infancy and during the pre-school years, few sex differences seem to be firmly established. The major difference that appears constant across empirical studies relates to aggression, with boys scoring higher on measures of aggression and tension than girls (Lansky et al., 1961; Hatfield et al. 1967; Baumrind & Black, 1967). Aggression is one behavioral disposition that consistently produces sex differences in observational and experimental studies (Oetzel, 1966; Maccoby & Jacklin, 1973; Safilios-Rothschild et al., 1975). Cross-cultural anthropological studies also tend to support sex differences in aggressive activity (Spiro, 1958; Whiting, 1963). Maccoby and Jacklin's (1974a) extensive review of empirical literature on sex differences reestablished the belief that aggression is one of the main differences between the sexes and that it is traceable through experimentation to differences that emerge around age 2 or 2½.

Lansky and associates (1961) pointed out that differences in aggression may reflect the many definitions currently used. Not only does the expression of aggression split along traditional physical-verbal dimensions, but the object of an individual's aggressive behavior also varies from one situation to the next. The authors suggest that aggressive behavior has different meanings, outlets, motives, and defenses for boys and girls. A basic question about reported sex differences in aggression is whether the sexes differ with respect to their aggressive potential, or whether this difference is culturally or experimentally produced. Campbell and Nadelman (1972) reported on the aggressive fantasies of children. In their study, nursery school girls equaled boys in human target aggression (throwing darts at a choice of objects) in the first session and exceeded boys in the next two. Second grade children displayed no sex differences until the third session, in which the boys exhibited more aggression. According to these findings, younger girls may be at least as aggressive as boys, and older girls, although more inhibited than their male peers, may sometimes show equivalent aggression. The researchers suggest that as they grew older, girls learn to suppress their aggression more than boys, and that in doing so, they may learn more indirect and socially acceptable ways to express their aggression.

Do experimental settings allow the expression of aggressive tendencies by all subjects? Male bias may influence the types of behaviors that are investigated. Related to this issue is the potential bias of raters in both observational and experimental studies. Sex-related cues about the gender of the observed subject were given to the rater of infants in the earlier studies, but even more such cues were provided to raters in studies of older children. To what extent do the sex role stereotypes of the rater contaminate the measurement of the behavior under investigation? Meyer and Sobieszek (1972) found that ratings made when the sex of the child was ambiguous were greatly influenced by the gender perceived by the rater and the expected sex-appropriate behaviors. Observers tended to notice more behaviors that countered their sex role expectations and to differentially label similar behaviors according to the actor's gender. Thus, a child's vigorous, uninhibited behavior was more often labeled aggressive if the child was perceived to be a girl. Kleeman (1971) found that differential reaction to the same child's behavior depends on the sex of the observer. Although the sex designation of the child (infants in this situation) was randomized (designations counter to the actual sex in half the cases), male and female subjects tended to look at infants of their own sex in a more positive light than infants of the opposite sex. The above studies suggest that sex-related cues in the setting may systematically affect the objectivity of raters' perceptions and, thus, their conclusions about observed behavioral sex differences.

Aggression as a behavioral attribute should not be confused with activity level. Aggression and activity are usually assumed to be the same, as are nonaggression and passivity. Clark and her colleagues (1969) showed that the choice of activity rather than the activity level per se differs for boys and girls. Maccoby and Jacklin (1974a) also suggested that measurements of activity are not standardized. Since activity level is influenced by motivational states, they suggest that there is limited usefulness in identifying stable individual or group differences without more detailed observations of the content (quantity and quality) of children's play behavior.

One creative study design varied the structure of the situation by observing children in two free-play settings, one of which was same sex and the other mixed sex (Greenberg & Peck, 1974). In the same-sex groups, boys showed more independent, assertive, and autonomous behavior; girls were more restrained, orderly, and dependent on adults. However, in the mixed groups, boys and girls tended to modify the extremes of each other's behaviors, resulting in less destructive behavior by boys and more independent behavior by girls.

The influence of same-sex versus mixed-sex groups raises serious questions about experimental designs that seek underlying behavioral dispositions but overlook this variable. Whether it is seen as a product of childrearing practices, innate psychological differences, or an interaction between the two, the expression of a disposition may be considered either pervasive or situationally specific. Assuming that dispositions are situationally specific, the sex ratio of the group becomes a crucial variable.

Maccoby and Jacklin's review of the literature (1974a) also showed that other differences besides amount of aggressive behavior exist between the sexes, namely, greater verbal ability of girls and greater visual-spatial and mathematical ability of boys. Behavioral differences on other variables, such as independence-dependence, achievement motivation, and other personality attributes, are not substantiated in experimental and observational studies or in literature reviews (Crandall et al., 1960; Mischel, 1966; Oetzel, 1966; Maccoby & Jacklin, 1973, 1974a). Serious methodological shortcomings may account for the existence of conflicting results regarding stable sex differences associated with personality attributes. The reliability of reported findings is weakened by the lack of observational and longitudinal studies that systematically measure these attributes. Frequently, measurements are not standardized with respect to any given attribute. Often researchers have developed measurements that are male oriented. Boys and girls growing up in a sex-differentiated culture may develop different ways of expressing the same behavioral attribute. Stein and Bailey (1973) suggested that dimensions of leadership and intelligence are male oriented and do not apply to achievement areas traditionally defined as "feminine." Stein and Smithells (1969) questioned how much the measures really relate to inappropriate behaviors, rather than to behaviors that the subjects could or might exhibit while interacting in a free environment.

We do not have the empirical data necessary to firmly trace developmental trends from one stage to another. There are few empirical data on how processes of sex roles and sex-typed behaviors develop from early infancy through adulthood. Only a small number of carefully planned longitudinal studies are found in socialization literature, and very few of these deal with sex role development.

Longitudinal studies face the problem of incorporating variables which may be standardized and yet applicable to different stages in the life cycle. To the extent that measurement of any given dimension differs from one stage to the next, it is unclear whether findings are comparable or whether they are subject to variation because of differences in the way measurements were taken. Also unknown is the extent to which the measurement may influence the respondent's behavior at a later time. Studies that look at both parents and children at one time and then at only children at a later time might provide suggestive relationships but do little to establish conclusive results about the relationship between variables measured at one time in relation to outcome variables that appear later. Also, the loss of subjects in certain longitudinal studies raises questions about the degree to which those who remain are a legitimate sample of the original population.

In general, the overall trend is for older children to be more sex typed than younger children, but developmental trends do not seem to be uniform, one-directional, or stable. Some aspects of sex role development may be more stable than others for a certain age and for members of one gender more so than for the other. McKinney (1968), for example, in applying choice stability to a specific area (friendship fluctuation), showed that this trait increases with age and that girls are more stable than boys. However, the whole idea of stability raises questions about how findings in any one experiment express a reliable rating of differences between the sexes, or even reliable differences measured in the subjects, when followup studies are not done.

In an extensive longitudinal study done over a 30-year period by the Fels Research Institute, Kagan and Moss (1962) collected data supporting the idea that aspects of adult personality are heavily influenced by early childhood experiences. More specifically, their findings suggest that continuity in characteristics and behaviors is greatly influenced by whether or not these characteristics and behaviors are compatible with prevailing sex role stereotypes. Those considered sex appropriate are encouraged and reinforced; those considered sex inappropriate are discouraged and suppressed. Thus, Kagan and Moss (1962) found that childhood passivity and dependency were related to adult passivity and dependency for women, but not for men. They suggest that dependent male children learn to suppress this response as they grow up in order to conform with socially acceptable standards of male behavior. Through these processes, characteristics and behaviors, such as nurturance and expressing feelings, that are shared equally by boys and girls up to early adolescence become sex differences at adolescence (Maccoby & Jacklin, 1974). During adolescence, dating and peer pressures push boys and girls to mold their behaviors according to sex role stereotypes in order to maximize mutual acceptance and popularity. From adolescence on, we tend to assume a linear progression toward further sex typing into adulthood, and then a plateau. As we shall see in Chapter 4, however, reversals in women's choices to less sex-typed ones or vice versa occur throughout the college years (and later on), thus raising questions about assumed sex role stability and unilinearity. We know very little about the nature of structural and sociopsychological factors that may enhance instability of sex typing. We could hypothesize, for example, that flexibility, nonauthoritarianism, and "openness" may be personality characteristics associated with less stability and pervasiveness of sex typing. Perhaps for some people sex typing tends to be more situational and therefore less stable, and for others it tends to represent a well-structured, pervasive cognitive and emotional outlook.

One factor that seems to influence the child's sex role development is intelligence, a neglected key factor in personality development. Kohlberg and Zigler (1967) compared the development of bright children with that of average children cross-sectionally and longitudinally, viewing intelligence as an aspect of development with an underlying structural component. Their approach to child development is consistent with a cognitive development view of sex identity and the sex-typing process. Intellectual growth is seen as transforming the perceived world of the child, and hence her/his social attitudes. Utilizing a number of measures (sex typing of verbal dependence and imitation, doll play choices that measure attachment and imitation of father and mother, ITSC's, picture tests, and peer preferences), the researchers found that parallel age trends exist in bright and average groups, with trends occurring earlier for the bright than for the average group. To the extent that these findings point to underlying dispositions that might differentiate children's responses, they raise the important methodological question of what becomes the appropriate base for comparisons when the researcher is looking at and interpreting sex differences. Keeping IQ's constant rather than using chronological age may give us different insights about trends and relationships.

Social Class

Social class as a crucial variable systematically affecting studies of sex differences in children has not generated a great deal of research. Probably out of practicality or availability, the typical research endeavor has used middle-class children. Therefore, can findings be generalized across socioeconomic groups? Social class and childrearing practices have been the subject of much interest in socialization literature. Yet, systematic designs that control for sex of parent and sex of child are few. Some researchers have reported marked variations in parents' behavior and a narrowing gap between the classes (Bronfenbrenner, 1961; Devereux et al., 1962).

When the child's behavior is the focus of attention, conflicting reports of class differences also persist. Many studies indicate marked class differences with respect to awareness of sex role patterns. Working-class children are more aware of distinct sex roles than middle-class children (Rabban, 1950; Hall & Keith, 1964; Hartley, 1960; Hartley & Hardesty, 1964). Rosen (1964), using a structured questionnaire, showed that perceptions of fathers more than perceptions of mothers can partially account for reported class differences. Nadelman (1973), using ink drawings, reported trends in the hypothesized direction: middle-class children showed more cognizance and less rigidity than working-class children. The assumption that is usually fostered to explain these differences is that "masculine" and "feminine" behavioral stereotypes are more clearly demarcated in the lower classes than they are in the middle classes. Middle-class parents are assumed to allow more overlapping of sex roles. Lefkowitz (1962), using peer deviance as a measure of sex role definitions, concluded the opposite: The boundaries between sex roles are defined less rigidly by lower class children than by middle-class children. And findings by Brown (1956), Hartup and Zook (1960), and Radin (1972) suggest that there are no class differences with regard to sex role preferences of children. Nadelman (1973) suggests that culture, sex of child, parental behavior, and socioeconomic status of the family interact in a complex fashion. At this point, it is not possible to determine the role social class may play in the development of sex typing. However, the question of how the potential middle-class biases of many researchers may lead them to overlook social class as a crucial variable, or even to ignore the fact that different classes may define sex roles differently, is of utmost importance. Class variations may be complicated further by racial and ethnic variations in sex role definitions and sex role socialization processes. For example, Thompson and McCandless (1970) concluded that "Negro girls . . . are learning the attitudes associated with the assertive role lower-class black women are forced to play" (emphasis added). On what basis is the decision made that one sex is forced into rather than chooses a certain behavior? It appears that, since assertive behavior is usually associated with "middle-class definitions of masculinity," the existence of this attribute in lower class females is precluded from being part of the "normal" role definition that may deviate from the "middle-class definition."

Conclusion

Research on sex role socialization is neither thorough nor well integrated with theory. Many large research gaps remain; interpretations of findings and resulting conclusions are at best speculative. This chapter examined selected aspects of the sex role socialization processes occurring in the home. But sex role socialization also takes place when children watch TV, read, and play with peers or toys; it continues when they go to school. Few sophisticated studies have attempted the difficult task of separating the roles of the various socialization agents. It is hoped that researchers will recognize sex role as a crucial variable in the conceptualization, design, and measurement of socialization studies, and not merely pay lip service to the importance of sex role awareness.

2. SAME-SEX AND CROSS-SEX INFLUENCES ON SEX ROLE SOCIALIZATION

Although there is some variability according to social class and age, same-sex influences generally are much more important than cross-sex influences for adolescents and adults. For men, other men seem to be the important reference groups; their opinions and standards heavily influence behavior. Women, on the other hand, are more open to cross-sex influences.

Practically all (94 percent) of the best friends of boys in the fourth through seventh grades are also boys. For 66 percent of the boys, all five of their closest friends are boys (Rowe, 1968). When boys and girls find themselves in settings in which they can interact and play together, such as the nursery school or the elementary school, they tend to segregate into same-sex groups (Joffe, 1971; Guttentag & Bray, 1976). An observation study of a class of 8- to 10-year-olds organized to encourage students to assume responsibility for their own learning showed that the self-initiated help patterns between the students were all same-sex patterns; there was practically no cross-sex help pattern of any kind (Damico & Watson, 1974).

Other studies found that preadolescent and adolescent boys (and girls) consider same-sex social interactions to be more reinforcing than opposite sex interactions (Meyer, 1959) and that same-sex attitudes for both boys and girls at all grade levels are more favorable than opposite-sex attitudes (Harris & Tseng, 1957). Also, friends of the same sex are much more influential than opposite-sex friends for high school junior boys (Woelfel, 1972). Finally, adolescents of both sexes tend to confide much more in same-sex than opposite-sex friends (Mulcahy, 1973).

Men are Primarily Influenced by Other Men

Although same-sex friends and peers are much more significant than opposite-sex peers for women as well as men, the overall evidence indicates that this is more consistently true for men at all ages. Beginning in adolescence, women seem to have two equally important reference groups. Although they confide in and receive support from other women, they use men as a normative reference group that sets standards of appropriate behavior. Since the most important goal for adolescent women is popularity and since popularity is measured by how much they are liked by boys, male acceptance is paramount. The importance of opposite-sex friends, therefore, is greater for women than for men (Woelfel, 1972).

Theories and experimental studies show that other men constitute the important reference group for men, since they occupy the higher, more powerful position in the sex stratification system. The theory expounded by Miller (1972) states essentially that men see only other men as valuable people whose opinion counts, and therefore they would also like to be loved by men. However, since affective relationships between men are socially taboo, men must seek affirmation from other men symbolically. Therefore, they try to impress other men through less direct means, such as by demonstrating their achievements through high-prestige positions, job promotions, and other status symbols. Men compete with each other in order to prove that they are worthy of admiration.

Since men cannot show affection towards other men, they must turn to women (the subordinate, powerless persons whom they do not admire) for love and sexuality. Therefore men compete for the love of women in order to dominate other men (Safilios-Rothschild, 1977). This behavior is unrelated to the female sex object, but relevant to the male-male relationship. When interacting with women, men can allow themselves to show feelings and no longer need to compete with each other.

Lipman-Blumen (1974) formulated a similar theory, called "homosocial view of sex roles," which suggests that men have a predisposition to be interested in and excited by other men. This predisposition is fostered and reinforced by the existing sex stratification system, which gives men control of valuable resources. Men can satisfy most male needs (including sexual needs, Lipman-Blumen argues) and, in addition, they can turn to each other for power, status, income, connections, and influence. Thus, men are much more interesting to other men than are women.

Women actually must become sex objects in order to divert men from their interest in other men.

Maccoby and Jacklin (1974), in their review of several sex difference studies, present abundant evidence that the activity level of boys increases when they are in the company of other boys; their aggression and competitiveness is stimulated, and they more often attempt to dominate other boys than girls. These data support Miller's and Lipman-Blumen's theories and indicate that Miller's formulation may be more complete, since it explains not only why men esteem the opinions and prefer the company of men, but also why they feel the need to compete with and to dominate each other.

These theories also have been substantiated by experimental studies on the nature of interactions between men compared with those between men and women. One study (Wolman & Frank, 1973) examined the interactions that take place when a "solo" woman finds herself in a professional peer group such as psychiatric residents or psychiatric graduate students. The study analyzed six peer groups of graduate students or psychiatric residents, each containing one woman, and examined the men's reaction of this woman. It also investigated the techniques that the woman used to counteract the men's reactions and the eventual outcomes. The men continued to talk among themselves, intellectualizing rather than expressing feelings, even though their training placed high value on expressing feelings. Emotionality became identified as feminine behavior, and the men avoided it because a woman was present. They tended to emphasize their masculinity by reinforcing the norm of intellectualization. The men also avoided allying with the woman in any way, because they feared that they might thus share her deviant role and they did not want to disrupt the all-male cohesiveness. They maintained their dominance by overt aggression, usually verbal. The men tended to relieve their anxiety by acting it out, for example, by joking and arguing rather than asking for help or revealing ambivalence, lack of knowledge, or fear—all labeled as feminine behaviors.

It became very clear that regardless of the woman's behavior and the coping techniques she used to become accepted into the group, she was always defined as deviant or marginal. In fact, the men did everything possible to isolate her in order to maintain the atmosphere of all-male interaction. The woman's presence made sexual attraction both possible and acceptable. This made the woman even more threatening, since a sexual relationship with her would disrupt the all-male relationships and friendships. Therefore, the only way to handle this situation was to completely ignore the sexuality of the woman and relegate her to a low, marginal status (Wolman & Frank, 1973).

Another study (Aries, 1974) used six experimental groups of five to seven members each. Two were all male, two were all female, and two were mixed. The groups met for five 1½-hour sessions to become acquainted with each other. Two observers, using Bales' (1970) method of recording each time a member spoke and to whom, gathered the interaction data. The sessions were tape recorded, and the content of the interactions was analyzed on the General Inquirer, a computer-aided content analysis system (Stone et al., 1966). The results showed that in mixed groups, males initiated and received more interactions than females, assuming at least two of the top three ranks in every session. Males addressed significantly more of their interactions to the group as a whole in all-male groups than they did in mixed groups (Aries, 1974). Bales (1970) suggests that interaction to the group as a whole is an exercise of power or influence in that group.

These findings represent good experimental evidence for Miller's (1972) and Lipman-Blumen's (1974) theories, since they show that men are much more concerned with having power over other men than over women. The experiments show clearly that there is much greater pressure for men to establish themselves in all-male groups than in mixed groups. Furthermore, males in all-male groups speak very little of themselves, their feelings, or their relationships with significant others (Aries, 1974).

These conclusions agree with those of Mehrabian (1971), who stated that men "posturally convey a more potent and dominant attitude" than women and are less affiliative and intimate in interactions, especially when interacting with other men. The findings thus far support this theory: men feel that it is inappropriate for them to express feelings when interacting with other men, but that it is appropriate to impress them and therefore symbolically gain their acceptance and admiration. The experiments support the hypothesis; they indicate that the greatest concern of members of all-male groups is how their peers perceive them. They want to compete with each other in terms of knowledge, interest, politics, travel, and so forth (Aries, 1974).

In direct contrast to the themes of competition and status that characterized the interactions in all-male groups, the themes of intimacy and interpersonal rela[illegible] characterized the interactions in all-female groups. Among the women, there was flexibility in the rank order of speaking. Active speakers said they felt uncomfortable if they took up too much time, and in some sessions they were silent so that others could assume leadership. Therefore, women in all-female groups develop ways to express affection and concern in their social interactions with other women (Aries, 1974).

When men and women were in the same group, some very interesting interaction patterns and changes occurred. The behavior of males in mixed groups changed dramatically: they referred much more often to themselves and their feelings and less often to achievements, knowledge, and hobbies. This indicates that the presence of women changes the all-male style of interacting, causing men to develop a more personal orientation, with increased one-to-one interaction, greater self-evaluation, and less aggression (Aries, 1974). In mixed groups, men do not have to be preoccupied with impressing other men but can concentrate on establishing relationships with women (with whom they do not have to compete, but who have value as sex objects).

In mixed groups, women tended to interact more with men than with women, since women are not socially significant to each other in a mixed group and are socialized to compete with each other for the attention and affection of males (Aries, 1974). Another important change in women's behavior in a mixed group was that, probably due to the presence of men, they spoke less, initiating only 34 percent of the total interaction, and they discussed achievements and social institutions, subjects that are traditionally male concerns, less than men and less than women in all-female groups (Aries, 1974). Whereas men in mixed groups are no longer competing with other men and can be more relaxed, introspective, and expressive, women tend to become more constrained, because they feel they must behave in a sex-appropriate, i.e., subordinate, manner. They curb talking, initiating interactions, and showing unfeminine concerns with achievement, leadership, or power (Aries, 1974).

These findings clearly show why "solo" women in a professional peer group encounter problems. By definition they are equal in status to the men of the group, and this is a greatly disturbing element. Men's behavior in this context and the dynamics of the interactions are geared toward restoring the balance by placing (or forcing) women into an inferior, deviant position.

A study of interpersonal choices among junior high school faculty further substantiates the fact that a man's reference group is other men and that only men's opinions count. The study showed that men tend to overchoose men, while women less frequently choose women. When asked to choose persons they respect, men overwhelmingly chose men (82 percent of the choices), whereas only 60 percent of women chose women (Greenberger & Sorensen, 1970).

Although same-sex peers seem to be most important, there is evidence that acceptance by one set of peers is related to acceptance by the other. The more a boy or girl is accepted by same-sex peers, the greater the chance that s/he will also be accepted by opposite-sex peers (Reese, 1966). Again, however, this relationship seems to be stronger for boys.

Boys who are highly accepted by other boys also tend to be accepted by girls (Reese, 1962), probably because the same-sex acceptance by boys is an important criterion for female acceptance, guaranteeing that the boy is "acceptable" and "masculine." Therefore, approval by other males is extremely valuable in itself not only as one form of self-validation, but also because it enhances boys' acceptance by girls.

The importance and effectiveness of the type of influence and pressure that peer groups exert on men and women is a very important issue. Some studies have shown that males are less persuadable than females in mass communications (Abelson & Lesser, 1958; Janis & Field, 1958) and in autokinetic situations (Whittaker, 1963). Another study indicates that male influence sources have a significantly greater persuasive effect than female sources, even more for female subjects than for male subjects (Whittaker, 1965; Saltzstein & Diamond, 1967). Thus, women tend to be more influenced than men, and males are more effective influences than females.

There is further evidence that the degree of sex role identification for females is related to the degree to which they can be influenced. The same type of relationship does not hold true for males, for whom ability to be influenced is related to self-esteem (Eagly, 1969). Thus, the more feminine girls are, the more they tend to be influenced. Another study shows that for females, popularity is related to need for approval. For males, the same kind of relationship does not hold; in fact, there is a negative relationship between need for approval and popularity (Tulkin et al., 1969). According to Crandall (1966), females who score low on social desirability frequently initiate aggression, expressed both physically and verbally, and less frequently withdraw from attacks. Therefore, unconventional girls do not behave according to feminine sex role stereotypes, and this probably explains their lower popularity.

All these studies indicate not only that women are more influenced than men, but also that they tend to be more influenced by men than by other women—a fact that highlights the importance of opposite-sex peers for women. The studies also show that the more women adhere to feminine sex role stereotypes, the more they need to be approved by others, the more they behave according to socially desirable norms, and the more they are influenced by other people, especially men.

How Same-Sex and Cross-Sex Peers Influence Women's Behaviors

When examining how same-sex and cross-sex peers influence women to behave according to sex roles, two questions are crucial:

- To what extent are women accepted by other women when they are not behaving according to sex role stereotypes?
- What kind of pressures are put upon women by opposite-sex peers when they are not behaving according to sex role stereotypes?

The first issue is relevant, partly because there is a relationship between the extent of women's acceptance by other women and the extent of their acceptance by men. In addition, it is important to examine the extent to which women who are rejected by men because they do not behave according to sex role stereotypes are accepted and supported by female friends and peers. The existing evidence is negative. Women rate the occupational prestige of women in traditionally masculine occupations lower than that of men in such occupations, while they rate the prestige of women in feminine occupations higher than that of men in the same occupations (Bose, 1973). But even more important is the finding from an experimental study showing that women were eager to associate with a bright female coworker but reluctant to choose a bright woman friend. Women were afraid to associate socially with bright women or women who do not behave according to sex role stereotypes, but they did not mind having their help in accomplishing a task. Exactly the opposite was true for men (Davis & Spiegler, 1974). These findings are important, for they indicate that women who do not behave according to sex role stereotypes do not have the support, friendship, and esteem of other women. It is difficult to determine whether it is women's disapproval that is more instrumental in causing men's rejection or vice versa.

Because men greatly influence women's plans and behavior, it is important to assess how much deviation from a feminine stereotyped behavior men are willing to accept before they penalize women or pressure them to change and behave according to sex role stereotypes.

Another study, conducted with 270 boys and 305 girls stratified according to social class, race, and IQ, showed that boys are generally more conservative than girls in their opinions on women's role (Entwisle & Greenberger, 1972). This study also showed that low-income black and white boys were much more tolerant of working women, possibly reflecting the economic need in high-poverty areas for women to work.

One of the most interesting findings of this study was that high-IQ, white middle-class boys tended to have the most conservative views about women's work. The data reported in this study revealed potential pressure against middle-class girls' academic achievement as reflected in the conservative views of their male classmates (Entwisle & Greenberger, 1972). It seems, therefore, that the opposite-sex peer group for high-IQ, white middle-class girls would tend to pressure these girls to forget the high educational and occupational aspirations that would make them tough competition for these boys. Thus, this very conservative group of boys influences girls negatively even if they are not friends, since they represent their obligatory opposite-sex peer group whose opinions count, especially in adolescence. After all, these boys are potential dates, and girls concerned with popularity cannot ignore them and their opinions.

The data on a solo woman in a professional peer group showed how uncomfortable men were with an equal-status woman. In fact, men punished her through a variety of psychological mechanisms, such as by rejecting her and by ignoring her sexuality (Wolman & Frank, 1973). An experiment with a mixed-sex group in which a target female was encouraged to talk much more, increase her participation, and exhibit leadership found that the men disliked the overly loquacious target female more than a similarly behaving male. Furthermore, they continued to dislike her even after she stopped behaving in a sex-inappropriate manner (Schwartz, 1970).

Men can punish women and pressure them to stop behaving in a sex-inappropriate way by rejecting them in dating, courtship, and marriage. Since women's greatest fear is that their sex-inappropriate behavior will make them less desirable to men, male approval represents a powerful pressure. A study by Komarovsky (1973) showed that even intelligent upper and upper middle class Harvard men who would date highly intelligent and interesting women wanted a wife who is a little less intelligent than they are and who would be willing to choose family responsibilities over a career.

It is important to examine the processes by which women learn that in order to be popular they must behave according to sex role stereotypes. Unquestionably, there are some boys who accept and even prefer an intelligent girl who has ambitious occupational plans. Therefore, a girl should be able to find one boy to date who will like her even though she is intelligent, high achieving, and ambitious. However, according to the American definition of popularity, it is not sufficient for a girl to have one boyfriend. It is the number of dates with different boys that determines the degree of popularity.

One article (Husbands, 1970) clearly described some of the shortcomings of American dating: it is usually superficial, and consequently the roles of the partners are rigidly defined. Since the dating pattern is casual and multiple and there is no opportunity for couples to get to know each other well, the set of norms that governs the interaction must necessarily be based on sex role stereotypes. Because American dating is so superficial, short-lasting, and multiple, the participants are primarily concerned with impression management rather than with getting to know each other. They must rely on the blueprints provided by sex role stereotypes in order to assure smooth interaction and predictability (Husbands, 1970). Hence, boys and girls come to associate popularity with adherence to sex role stereotypes and femininity with desirability.

Dating patterns in other societies in which dating involves only two people or groups without any particular pairing tend to be more helpful. These patterns provide social support and reassure women of their desirability, even when the women do not behave according to sex role stereotypes (see chapter 5). They are more helpful because it is always possible for a girl to find one boy who likes her and approves of her, even if she does not behave in a sex-appropriate way. But within the American style of dating, if a girl is rejected by a "star" (a popular boy) because she is too intelligent or not conventionally feminine, her overall popularity suffers.

A vicious circle can be triggered through which the girl loses self-confidence. She gets the clear message that in order to be popular with boys, she must revert to strict sex-appropriate behavior. It takes an unusually strong girl to withstand rejection by boys, and the girls who can do this tend to have much higher educational aspirations and higher career and achievement motivations. Other coping mechanisms are to bypass dating during adolescence and postpone it until later or to date infrequently and only boys that accept and admire intelligent, interesting girls. But even those techniques require great strength, since stereotypes dictate that only unattractive girls do not date.

More recent data from the early and middle 1970's indicate that many boys and young men have become "liberated," accepting and even preferring women who are not constrained by feminine stereotypes. A nationwide study of high school students showed that about one-third of the girls who planned to work even when their children were young, who did not plan an early marriage, and who refused to mold themselves according to the wishes and needs of boys dated as often and as many boys as traditional "feminine" girls (Rosen & Aneshensel, 1976). Increasingly, girls can choose whether to behave within the narrow range of sex-appropriate behaviors and options, and even when they choose sex-inappropriate behavior and thus expand their options, they can still be popular, desirable, and attractive. The only difference is that they may be popular with different types of boys than those girls who limit themselves to sex-appropriate options and behaviors. If we evaluate the boys who are (or claim to be) "liberated," that is, the most liberal or the most competent (Safilios-Rothschild, 1979; Bayer, 1975), then we must conclude that girls who reject sex role stereotypes are not the losers.

3. WOMEN'S ACHIEVEMENT AND ACHIEVEMENT MOTIVATION

Until the early 1960's, research and writings on achievement and achievement motivation concentrated on men and produced little on the needs and motivations of women (Alper, 1974). The lack of interest in studying this aspect of women's behavior may have been partly caused by equivocal or contradictory findings on women's achievement motivation (McClelland et al., 1953). The assumption that male and female achievement motivations were governed by essentially the same laws was also misleading (Alper, 1974).

As early as the 1950's, Field (1951) pointed out existing differences by conceptualizing achievement motivation in women (but not in men) as linked to the need for social acceptability, that is, the need to be liked. Field's work further discouraged research on women's achievement because it was interpreted by McClelland et al. (1953) and other researchers to mean that the achievement motive was less central for women than the affiliative motive, and therefore that women were not "good" subjects for the study of achievement (Alper, 1974). Thus, Matina Horner's (1968, 1969, 1970) study of women's achievement appeared in almost a total research void. Accordingly, her findings were taken at face value, created a great stir, and were almost unquestioningly used to explain the lesser achievements of women.

The "Fear-of-Success Motive"

According to Horner, because women view femininity and achievement as two desirable but mutually exclusive goals and because they are eager to be liked by others, especially men, they are more likely to develop a "fear-of-success motive" (or motive to avoid success). This is a disposition to become anxious about achieving because of the expected negative consequences (such as social rejection or feelings of being unfeminine). The presence of a motive to avoid success implies that the desire of women to achieve may be thwarted by their anxiety about negative consequences and by their anxiety and ambivalence about the desirability of achievement and success (Horner, 1972).

Horner hypothesized that the motive to avoid success is significantly more characteristic of women than of men and also more characteristic of high achievement-oriented, high-ability women, who aspire to or are capable of achieving success, than of low achievement-oriented, low-ability women, who neither aspire to nor are able to achieve success (Horner, 1968). Horner's first hypothesis was supported by data in which over 65 percent of the subjects, coeds from the University of Michigan, told avoidance-of-success stories following the stimulus "after first-term finals, Anne finds herself at the top of her medical school class," while over 90 percent of the male subjects told success stories following the "John" form of stimulus. Similarly, her second hypothesis was partially supported because Horner found that the motive to avoid success tended to be more frequent among women who were in the honors program than among other women, although this trend was not statistically significant (Horner, 1968).

Horner had, furthermore, hypothesized that the motive to avoid success would tend to thwart the performance of women much more in situations of interpersonal competition, more so against male than against female competitors. This hypothesis was based on the assumption that, since men judge women's femininity and desirability, competing with them and winning out over them would tend to diminish the desirability and acceptance of women by men—an assumption which, as we shall see, is not consistently supported by tests. To test this hypothesis, she compared the performance level of 30 male and 30 female subjects on several achievement tasks in a large mixed-sex, competitive situation with the subjects' subsequent performance in a strictly noncompetitive but achievement-oriented situation; in the latter situation, the only competition involved the task and the subjects' internal standards of excellence (Horner, 1968). In this group, 13 of the 17 girls who had scored high on the motive to avoid success performed at a significantly lower level in the mixed-sex competition than they did in the noncompetitive situation. On the other hand, 12 of the 13 girls who had scored low in fear of success did better under the competitive than the noncompetitive condition, and so did most (two-thirds) of the boys.

Horner's findings on the prevalence of a motive to avoid success among women spread like fire because they seemed to explain many other findings and to "blame the victim" for the lack of achievement. A recent study (Lunneborg & Rosenwood, 1972), however, tested and challenged McClelland et al.'s (1953) and Horner's (1968, 1970) assumption that the affiliative motive is more important than the achievement motive for women. College men and women were asked what makes them happy, sad, and angry. The responses indicated that typical sources of happiness for both sexes were internal and had to do with finding one's identity, defining personal goals, and growing in self-acceptance and self-awareness. In both sexes, typical sources of anger and sadness, on the other hand, were external, that is, war, pollution, poverty, injustice, overpopulation, and ignorance. A common type of achievement response was one which actually represented a fusion of the affiliative motive and the achievement motive; that is, the person would be happiest if s/he could have a rewarding career and also help others (Lunneborg & Rosenwood, 1972). Therefore, this study presents evidence of the breakdown of sex stereotypes with regard to the relative presence of need affiliation and need achievement among men and women. The lack of statistical significance in three out of the four differences that were in the direction of greater achievement in males and greater affiliation in females is particularly important. Thus, it would be more accurate for psychologists to describe college men and women as currently possessing both needs, with men increasingly becoming more concerned with loving and close interpersonal relationships and with women increasingly becoming more concerned with pride in academic and occupational achievement.

Replications and Criticisms of Horner's Fear-of-Success Motive

Although Horner's research and conclusions have been seriously challenged, they did have a great impact and gave rise to several research studies which tried to replicate her findings or to examine how the results would change if several of the variables were changed or if additional variables were introduced. Her work stimulated a great deal of critical thinking, and even though the validity of her findings has been questioned, she can be viewed as the psychologist who directly and indirectly helped develop research and theory on women's achievement motivation.

Although a great number of studies have replicated Horner's research, in 1972 she reviewed and discussed only the replication studies that supported her earlier research, ignoring those that varied greatly from her own conclusions. She refers to her study with Rhoem (1968), a small study by Schwenn (1970), another of her own later studies (Horner, 1970), and a study by Watson (1970), as well as the studies by Prescott (1971). One similarity in these studies is the very high percentage of subjects (between 81 and 88 percent), predominantly women, with fear-of-success imagery. The only exception is Prescott's study, which included male freshmen, 47.2 percent of whom reported fear-of-success imagery. The only lower percentages were reported by Horner and Rhoem (1968). In this study, only 47 percent of the girls at the 7th grade level reported fear-of-success imagery, although 60 percent of the 11th grade girls gave reports of such imagery. These findings did not invalidate or modify Horner's own theory, since she had hypothesized that women's fear of success would tend to increase with age because of a growing concern with femininity, as well as the increasing relevance and feasibility of achievement and success in women.

A number of other methodological limitations in Horner's studies as well as in the replication studies that have followed her methods and techniques have to do with the scoring methods, the types of category combinations used, and the sampling of respondents and their representativeness in terms of social class, parents' characteristics, race, and other relevant background data.

One of the criticisms of scoring relates to the sex of the scorer. In a study by Robbins and Robbins (1973), scoring was done by two coders, one male and one female (as opposed to the 1968 Horner study, which used two females who agreed 91 percent of the time for 90 protocols). There was 94 percent agreement for the 119 stories examined. The researchers found that the men's stories about John showed the greatest differences between male and female coders.

Another criticism centers around the coding categories used by Horner. When a dichotomy between avoidance and nonavoidance of success was not used, and a third category, called "ambivalence about success," was used instead, female coders scored many more responses in that category. Therefore, when ambivalent responses are combined with the fear-of-success category (as Horner's two-category schema requires), differences between male and female coders are nonsignificant but are most marked in the Anne story told by female respondents. Under these conditions, female scorers are more likely to find fear-of-success imagery than males, though still to a much less degree than in any of Horner's college samples. If female coders are used exclusively (as in Horner's and some of the replication studies) and the number of scoring categories is restricted to two, the apparent extent of fear-of-success imagery may be unwittingly augmented. This is because many people express conflict over whether the achievement of success is worth the price, even though they do not necessarily contemplate giving it up altogether. (This scoring procedure may also explain why women with the motive to avoid success can in fact achieve highly.) This methodological problem was accentuated in Horner's study, since her coders knew that all the Anne stories were written by females and all the John stories by males. These coders might well have been swayed by their expectations in borderline cases (Rosenthal, 1966).

Tresemer (1974) was even more critical of Horner's scoring techniques, reporting that he found no extensive scoring manual with sample stories for making sure that coders will rate stories alike and no standard procedure for testing all motivation constructs. He also pointed out a different type of scoring limitation in Horner's data in that all types of negative comments were grouped together as "motives" to avoid success. In fact, he argues that these negative comments represent very different types of responses, such as negative responses that refer to negative antecedents in the stories, that is, negative experiences during the struggle for success. According to Tresemer, this type of response represents approximately 36 percent of the girls' responses (a percentage he obtained when he rescored Horner's original stories according to her system). Additionally, he noted that about 15 percent of the girls mentioned negative events that were actually unrelated to success. Therefore, he claims, these two different categories of negative comments should not be lumped together with answers that refer to negative consequences of success (Tresemer, 1974).

Alper's (1974) research also showed that to obtain a category similar to what Horner called a "fear-of-success motive," she had to combine different types of answers (some of which did refer to the dangers of success), as well as some that were unrelated to either achievement striving or task completion. The implication of this methodological criticism is that the scoring techniques used by Horner tended to inflate the percentage of fear-of-success themes in the responses obtained. This inflation was achieved by using a "mixed" category, which included totally unrelated responses (that is, responses that cannot be validly classified under "fear of success") and responses that had a common ambivalence about success (an ambivalence which does not imply the presence of a powerful motive to avoid success). Probably Horner's rationale was that any kind of response that does not clearly subscribe to success implies fear of success; however, such a rationale seems farfetched.

While it is often difficult to distinguish the methodological from the more conceptual criticisms of Horner's work, there are two sets of outstanding criticisms that can be viewed as conceptual-theoretical rather than strictly methodological. One issue, raised mainly by Tresemer (1974), relates to the appropriateness of the definition and conceptualization of success. Tresemer questions whether success is an objective standard that is imposed by society and that, in American society, is usually associated with the acquisition of status and money, or whether it is a much more complex concept, subjectively defined and not to be evaluated exclusively in terms of objective criteria and standards. He raises the issue of whether the stimulus question should not be that Anne or John has reached a subjectively defined success, such as "after much work Judy has finally gotten what she wanted." In this way, Tresemer claims, he would not impose assumptions and definitions of success on the respondents but would be able to tap their dispositions about personal success and their views of their own ability to reach goals, and thus lessen the influence of situations that have special meaning in our culture (Tresemer, 1974). The issue that Tresemer raises refers to the extent to which we can identify high achievement with success--a success defined in the American culture, at least up to the middle 1960's, in terms of status position. After all, achievement is a broader concept that refers to different definitions of success, which vary with changing cultural standards, beliefs, and values (including subcultural values), as well as many other social and cultural factors. His criticism is important because it warns us about the dangers involved in identifying high achievement with a cultural definition of success prevailing at a particular time and in a particular culture, and not necessarily accepted by the entire population, as was done in Horner's study.

Tresemer's criticism takes on more importance when we examine it in the light of Hoffman's data, which show that while in Horner's 1965 study only 8 percent of men showed fear-of-success responses, in 1971, 77 percent of the men and 65 percent of the women gave responses that could be coded as "motive to avoid success"

(Hoffman, 1974). The men's stories seemed to question the value of success itself, at least in academic and professional realms. Their stories were, however, different in content from women's stories, with only 15 percent of the male stories making any reference to social rejection, while the most frequent female story indicated that Anne suffered social rejection as a result of her success.

Some people would argue that these more recent findings by Hoffman reflect changes brought about partly by the Women's Liberation Movement, which has freed women somewhat from the fear of success, and partly by the counterculture ethic, which tends to devalue the importance of hard work and financial success for both men and women. Tresemer (1974), however, claims that the available data from different studies do not actually show such a shift in attitudes in recent years. When he arranged the different achievement studies in chronological order, he found no trends in the 5 years since Horner reported her research to support the contention that changes have occurred in social values that would explain why men reported a higher rate of fear of success in 1971.

Another issue, partly methodological and partly conceptual, with important implications for the conceptualization of women's achievement motivation is whether the motive to avoid success (as investigated originally by Horner and as replicated by many other investigators) refers to success in general or to a motive to avoid sex-inappropriate achievement in a sex-inappropriate field or activity. Since the original stimulus presented by Horner defined success for women as "being at the top of the class in a medical school," success was achieved in a sex-inappropriate behavior. The women had not only achieved highly—a behavior which in itself tends to be sex inappropriate—but they had achieved highly in a "masculine" field. We cannot, therefore, be sure to what extent the measured motive to avoid success is intrinsically related to avoidance of success or to avoidance of being labeled "masculine" because of sex-inappropriate occupational pursuits (Tresemer, 1974).

This criticism seems valid, since several studies that eliminated the reference to medical school or replaced success in medical school with success in nursing school obtained significantly more success stories and fewer avoidance-of-success stories. For example, a study undertaken by Alper (1974) dropped the reference to medical school and instead posed the following stimulus question: "After first-term finals, Anne finds herself at the top of her class." Alper found that whereas 89 percent of Wellesley women gave answers including the motive to avoid success when the reference to medical school was present, only 50 percent were now giving this response. Furthermore, when Alper substituted the reference to medical school with a reference to nursing school, she found that women who were being trained to become nurses gave success stories in 86 percent of the cases. The same women gave success stories in only 20 percent of the cases that referred to medical school. However, the same two forms used with liberal arts students evoked success and avoidance stories equally often (Alper, 1974). Similarly, in another study where the reference to medical school was replaced by a reference to a school of education, significantly fewer avoidance stories were reported by women than when the reference to medical school was included (Breedlove & Cicerelli, 1974).

Although the reference to a traditionally feminine occupation diminishes the motive to avoid success (in studies by Alper and by Breedlove and Cicerelli), a considerable percentage of women, whether in traditional "feminine" fields or not, continue to show the motive to avoid success. The question that must be raised, then, is why does the decrease in the imagery related to the motive to avoid success diminish but not altogether disappear? The explanation may be that women who are classified as reporting the motive to avoid success actually belong to two categories: (1) women who are quite concerned about behaving in a sex-inappropriate way, and therefore are anxious to avoid success or competing with men in a masculine field; and (2) women who are very concerned with being feminine in an even more traditional sense, which precludes the possibility of any type of high achievement in either a masculine or a feminine field. Thus, when the reference to medical school is replaced by reference to a feminine occupational field, a considerable percentage of women no longer report the motive to avoid success, since the women in the first category now feel free to achieve and succeed. Stories reporting the motive to avoid success do not, however, disappear altogether, because the women in the second category are still inhibited or at least ambivalent about achieving and succeeding, since achievement itself is considered incompatible with femininity.

The validity of this achievement typology among women is supported and amplified by another research study. This study reports that women who respond with motive to avoid success stories aspire to traditionally feminine occupations, while those who do not respond with such stories choose either feminine or masculine occupations. The study also found that women who do not report the motive to avoid success fall into two categories: (1) those who do not aspire to careers outside the home (and therefore have no reason to fear success); and (2) those who want a career. Furthermore, women who want a career can be subdivided into those who have resolved all ambivalence about success in any context (masculine or feminine) and feel free to choose an atypical female career, and those who have resolved their ambivalence about success only when it takes place within a sex-appropriate context in which they do not have to compete with men (Anderson-Patty & Shelley, 1974). Criticisms of the meaning of the presence or absence of the motive to avoid success are quite fruitful and point to a typology of women based on their ambivalence toward success, their motivations, the nature of the success they want, the conditions under which they want to succeed, and how much they want to achieve.

Some investigators have examined how women's acceptance of sex role stereotypes, particularly stereotypes that define high achievement (especially in masculine fields) as sex-inappropriate behavior in women, influences their achievement motivation. These researchers have also studied how this acceptance influences the extent to which women show a motive to avoid success. Lesser and his colleagues (1963), for example, report that, unlike underachievers, high-achieving high school girls do not accept the cultural dictum that achievement is a masculine behavior and inappropriate for women. Another study conducted by Alper used a Wellesley Role-Orientation Scale (WROS), which is a 24-item pencil-and-paper self-rating scale consisting of three 7-item subscales and three filler items. The three areas tapped by the subscales are: (1) traits that college girls generally regard as feminine rather than as masculine; (2) role activities that college girls find acceptable for themselves as women; and (3) career and/or career-oriented activities that college girls consider more appropriate for men than for women (Alper, 1974). Alper found that subjects who accept the sex role stereotypes may respond with what appear to be success stories, but the achievement goal is likely to be very different. Thus, in stories set in the present, the focus of unmarried women is the attainment of husbands, that is, using achievement to realize their main goal—marriage. In future-oriented stories, married women who take jobs presumably do so after the children are grown; also, women who accept sex role stereotypes write about women doing the chores as they work for men. In other words, women themselves are not the achievers, but serve as auxiliaries to the real achievers, men. Women who do not accept sex role stereotypes usually tell stories about women engaged in tasks of considerable importance, and their efforts are typically highly successful. Their success stories generally include four different themes: success through hard work; support by an achieving female model; achievement through cooperative efforts; and achievement facilitated by competition or rivalry (Alper, 1974).

Alper also reports that those who accept as well as those who reject sex role stereotypes relate stories that involve dangers of success. However, there are significant differences in the frequency of reporting danger stories and in the nature of the projected danger. Those who accept sex role stereotypes much more frequently report danger stories, and they present the danger as affecting either the achiever or her interpersonal relationships. On the other hand, those who reject sex role stereotypes describe the danger as unrelated to the person or her relationships but pertaining to the project which fails. Hence, for women who do not adhere to sex role stereotypes, the dangers accompanying success have very different implications, since they affect careers but not personal lives (Alper, 1974). What Alper's findings suggest is that the imagery of avoidance of success, as reported by Horner, corresponds to the kinds of stories and projections about women's achievement and success made by women who adhere to sex role stereotypes.

A further study by Alper and her collaborators (1972), in which the persons presented in a chemical laboratory situation included a man and a woman (with the man being the worker in some cases and the woman being the worker in others), the findings are particularly interesting, because they show how the perception of the stimulus is distorted according to the degree to which women accept sex role stereotypes. When women accept stereotypes (even when the woman is the worker and the man is just looking on), they report a success story rather than an avoidance-of-success story. In responding with a success story, however, they present the man as the woman's instructor, showing her how to perform the task. In this way, the success portrayed in the story is credited to the man rather than to the woman, who appears as a novice or an assistant. However, when the man is the worker, the women never present him as the assistant but always as the professor or the person who solves the problem at hand, and the woman is portrayed as an assistant, learning or observing in order to learn how to perform the task. The reverse is true for women who do not accept sex role stereotypes. When the woman is the worker, these women credit the success either to the joint efforts of the two people or to the woman presented in the role of the worker (Alper et al., 1972).

Some researchers have claimed that if the fear-of-success responses to the female stimulus occurred exclusively among females, it would indicate that women are ambivalent or have negative attitudes toward achievement and face an internal conflict. If, on the other hand, fear-of-success responses occur exclusively in response to the female stimulus, but equally among both sexes, then a different kind of explanation may be appropriate. The stereotypes dealing with the appropriateness of achievement for women may be learned and accepted by both sexes and simply reflected in these responses (Monahan et al., 1974). Actually, in a study of high school students from the 6th through the 11th grades, a greater percentage of males than females responded negatively to the female stimulus, while there was no difference in the percentage of boys and girls who gave negative responses to the male stimulus. These findings suggest that both boys and girls tend to accept sex role stereotypes, which indicates that females embarking on a professional career, especially in a sex-inappropriate field, can expect many difficulties, hardships, and internal and external conflicts. Successful females in these fields were often viewed by students of both sexes as unattractive, immoral, and dissatisfied (Monahan et al., 1974). Therefore, the authors conclude that Horner's results and their own can be accounted for by both sexes' degree of adherence to conventional sex role stereotypes. However, they acknowledge that it may be necessary to tap an additional dimension, since not only do both sexes express awareness of the negative female stereotype, but also girls are aware of potential internal conflict and try to avoid the conflictive situation (Monahan et al., 1974).

In a comparative study of college students in Australia and the United States, male subjects were found to write a larger proportion of fear-of-success stories to the Anne stimulus than to the John stimulus. However, both sexes provided similar thematic material concerning the different consequences of male and female success (Feather & Raphelson, 1974). Hence, Horner's procedure seems to tap not only socially acquired theories or stereotypes about the appropriate achievements for males and females in our society, but also the consequences of violating the norms for each sex, which are equally stereotyped.

The degree to which women accept the traditional sex role stereotypes has been found to be significantly related to scholastic achievement as well as to educational aspirations. For example, high school girls who accept competition for grades as appropriate to the female role achieve higher grades (matched for verbal ability) than those who do not (Houts & Entwisle, 1968). Similarly, in the absence of ability differences between those who had accepted and those who had rejected sex role stereotypes, there was a tendency for those who had rejected the stereotypes to achieve a higher grade average at the end of the year in which they served as subjects (Alper, 1974). Lipman-Blumen (1972) also found that women who held the traditional view of the female role did not plan to go to graduate school, whereas most of the women with a contemporary viewpoint did. Women with a traditional sex role ideology believed that the only type of appropriate achievement for women was vicarious, through marriage to an achieving husband (Lipman-Blumen, 1972).

The research studies reviewed suggest that, instead of most women having an underlying motive to avoid success (as Horner wanted us to believe), women's achievement motivation may be better explained by how unquestioningly sex role stereotypes are accepted. Therefore, instead of a dichotomy between women who show the motive to avoid success and those who do not, the following continuum may be more appropriate:

- Women who accept the traditional sex role ideology, which indicates that any type of direct achievement is inappropriate for women and incompatible with femininity. Only "vicarious" achievement is open to these women (Lipman-Blumen, 1972).
- Women who accept only the sex role stereotype according to which achievement for women is not appropriate in masculine occupations but is acceptable in feminine fields and activities.
- Women who reject the traditional sex role ideology and who feel free to achieve in any field or activity.

Testing Horner's Original Hypotheses

The relationship between fear-of-success imagery and actual achievement of women is unclear and unproven. Actually, the presence of fear-of-success imagery in women's responses does not seem to inhibit their achievement as Horner had hypothesized. In fact, Horner found that such imagery was more prevalent among women honor students (Tresemer, 1974). Another study reports that the presence of the motive to avoid success does not prevent women from being successful. It found that 27 percent of wives who do not earn an income write stories with fear-of-success imagery; among those who earn one-tenth to six-tenths of the family income, 42 percent write stories with fear-of-success imagery; and among wives who earn six-tenths or more of the family income, 61 percent write fear-of-success stories (Moore, 1974). Thus, it seems that Horner's original hypothesis is not substantiated: fear-of-success imagery does not inhibit women's achievement. It may be that the more a woman defies sex role stereotypes and behaves in a sex-inappropriate manner (by earning as much as or more than her husband), the more she becomes anxious that her husband (or others) will not like her behavior. Fear of the possible negative consequences of success does not, however, seem to keep women from succeeding.

Coming now to the second hypothesis, that the fear-of-success motive is found in women much more often than in men, Tresemer (1974) reports that in the 61 studies that have examined the motive to avoid success (many of them published or unpublished Ph. D. dissertations or papers), the rate of fear-of-success stories varies from 11 percent to 88 percent, with a median of 47 percent. Thirty-six of these studies included men, and the percentage of men responding to the female stimulus with fear-of-success themes ranged from 14 percent to 86 percent, with a median of 43 percent, that is, not much lower than the level for women reporting fear-of-success themes. Indeed, in about 17 of the 36 studies, males had higher levels of fear-of-success imagery than women. For example, a study conducted among high school students ranging from 9 to 17 years of age showed that the fear-of-success stories were not more frequent among girls than among boys and were not more prevalent in reaction to female than to male cues (Jackaway, 1974). In fact, this study did not support the hypothesis that sex differences in fear-of-success motivation exist in children in grades 4 through 10. The same study reported that the number of fear-of-success responses made by 10th grade boys to the male stimulus were significantly higher than those made to the female stimulus. These findings conflicted with the results of several pilot studies which indicated that college-age males respond with more fear-of-success stories to female cues (Jackaway et al., 1972). Levine and Crumrine (1973) contradict the findings of Horner and the researchers who replicated Horner's work. They found no difference in the percentage of fear-of-success replies by sex of respondent or by sex of stimulus. They also found that men's stories about Anne had approximately the same proportion of negative sentences as those about John. The women's responses about John were similar to the men's, but fewer women wrote stories with a high number of negative sentences about Anne than about John. In addition, the study found that more men than women wrote denial stories and men were more likely to write denial stories about Anne than about John. More than twice as many men as women wrote denial stories about Anne, indicating that men tend to be more afraid of women's success than women are of their own (Levine & Crumrine, 1973). Thus, Horner's second hypothesis is not substantiated.

Finally, Horner's third hypothesis, that women can be expected to show more fear-of-success motive when competing with men than when competing with women, is substantiated by the data, as we saw earlier. Women who compete with women show less fear-of-success motive, but it does not altogether disappear. A study of high school students in coed and noncoed high schools (who had attended coed or noncoed elementary schools) showed that girls in noncoed schools showed consistently less fear of success than girls in coed schools. Furthermore, those who had attended a noncoed elementary school showed almost no fear of success (Winchell et al., 1974). This hypothesis seems to be amply substantiated.

Who Are the Women Who Are Not Afraid To Succeed

The second major type of methodological limitation in Horner's study (as well as in many of the replication studies) lies in the types of populations sampled. Horner appears to have had little concern with the representativeness of the respondents or with the role that might be played by the respondents' social class or racial, ethnic, religious, and other background characteristics. For example, in her original study, 78 percent of the 59 girls who scored high on fear of success came from predominantly upper middle and middle-class homes and had successful fathers who were businessmen or professionals, but only 35 percent of the 31 subjects who scored low in fear of success had similar backgrounds. It is not insignificant that 65 percent of the women who did not show fear of success were of lower middle class background (Horner, 1972). Most of the later replication studies fail to report the social class composition of the male and female respondents. Therefore, it is difficult to ascertain to what extent the variability in the respondents' social class backgrounds may be the primary reason for the variability in the percentage of those who present the motive to avoid success in their stories.

Robbins and Robbins (1973) suggested that the difference in the percentage of women who give fear-of-success stories in Horner's study (65 percent) and in their own study at Rutgers (48 percent) may be due to differences in the social class composition of the two samples. They suggest that, since women at Rutgers come from lower middle class families and often are the first in the family to go to college, these women may view the experience as the gateway to new opportunities and, for this reason, have higher levels of aspiration than upper middle and middle-class Radcliffe or University of Michigan women. Robbins and Robbins also point out that differences in percentages of reported fear-of-success imagery might well reflect sampling errors and biases due to the small and unrepresentative samples of college students used in the two studies. Hence, it is very difficult to make any claim concerning the generalizability of achievement findings as they apply to the student bodies of the studied schools, let alone as they apply to college students or young adults in general (Robbins & Robbins, 1973).

A number of studies report that the race of the respondent significantly affects women's motivation to avoid success (Weston & Mednick, 1970; Moore, 1974; Randall-Puryear & Mednick, 1975). Randall-Puryear and Mednick, for example, report that black college women at four campuses consistently showed less fear of success than white women. Also, Moore (1974) reports that the highest percentage of fear-of-success stories ([illegible] percent) was elicited from white males speaking about Anne, while the lowest percentage (23 percent) was produced by black females speaking about John. The percentage of fear-of-success stories was virtually the same for black females speaking about Anne as for black males speaking about John. On the other hand, while white females were more likely to tell fear-of-success stories about John than Anne, white males correspondingly showed more fear of success about Anne than John. Therefore, race seems to be a very important variable and may account for at least some of the variability in percentages of fear-of-success stories, to the extent that black males and females were included or excluded from different samples.

Fear of Success or Fear of Rejection by Men

Horner assumed that women feel ambivalent and afraid of success because they perceive success as incompatible with femininity. Accordingly, success tends to make women less desirable to men (who feel threatened) and may lead to their being rejected by men (Horner, 1968). Other authors (Lipman-Blumen, 1973) have discussed the "minus femininity" that accompanies a successful woman, that is, the automatic discrediting process regarding a successful woman's femininity and sexuality. Actually, some studies show that women who are ambivalent about success in their careers also tend to be ambivalent about success in their close interpersonal relationships and about their femininity (Anderson-Patty & Shelley, 1974; Makosky, 1972; Anderson-Patty, 1974). This ambivalence, not only about achievement but also about femininity, in women who report fear-of-success stories seems to be related to their fear of competing with men and, therefore, to their fear of jeopardizing even further their femininity and their chances of being desirable to men. Another study showed that women were allowed to explore and fulfill their intellectual potential when they did not have to compete with men with whom they had an intimate relationship. Thus, success over male colleagues was tolerated, but higher achievement than a fiance or a husband was still viewed as disruptive and undesirable (Gray-Shellberg et al., 1972).

A study of likability, however, showed that women competent at so-called masculine tasks were rated more likable by both sexes than either so-called feminine competent or incompetent women (Spence & Helmreich, 1972). And another study reported that men select bright women as partners for both social and intellectual tasks and do not reject bright women as partners because of their ability and ambition (Davis & Splegler, 1974). The study also showed that men prefer a bright male friend but not a bright male coworker, who might prove to be too much competition. Women, on the other hand, were eager to associate with a bright female coworker but were reluctant to choose a bright woman friend because, for women, social competition is more relevant than academic or occupational competition (Davis & Splegler, 1974). It generally appears that men avoid competition with a bright male in an achievement situation, while women avoid social competition with bright women. The fact that men and women use different criteria for selecting work and social partners may contribute to women's fear of success. Because women choose a different type of partner for intellectual and social tasks, they may assume that men choose women partners on the same basis, and therefore they fear that they may be rejected socially if they succeed academically. Another possible explanation is that since academic success is generally considered masculine, women may disapprove of high-achieving women because they consider them as deviating too much from established sex role norms. Thus, it does not appear that women's fears of rejection are consistently realistic. Fear of success is realistic to some extent. Successful women may be still liked, but they do tend to threaten both other women with whom they may compete for men as well as men who have to compare their achievements with them as fiances or husbands. The problems involved in a woman's success seem to lie more in others who have to learn how to deal with it than in herself.

A great deal of evidence suggests that women's fears of rejection by men, their fears of lack of desirability, and their ambivalence about their femininity can be alleviated by a close and stable relationship with a man who accepts and supports their achievement strivings. In the Schwenn study (1970), for example, girls who showed anxiety about success and social rejection and changed their career aspirations toward a more traditional direction were either not dating at all or were dating men who did not approve of career women. On the contrary, girls who scored low or high in fear of success but continued to strive for innovative careers (despite their fear of success) were either engaged to or seriously dating men who were not against and were not threatened by their success or their occupational goals (Schwenn, 1970).

Another study found that older female graduate students showed significantly higher achievement motivation than did groups of younger female graduate or undergraduate students (Lubetkin & Lubetkin, 1971). Although this study did not make specific reference to the marital status of the two groups of women, the probability is much higher that the older female graduate students were married. This factor probably explains the difference in achievement motivation because the fact that these older female students were able to return to graduate school indicates approval and support by their husbands.

Origins of High Achievement Motivation

A very important issue in the study of achievement is the nature of the relationship between the socialization experiences of boys and girls and the type and extent of their achievement motivation. The literature tends to neglect some of the family antecedents in women's achievement motivation; when they are examined, the research is usually based on the mother-daughter relationship and very rarely on the father-daughter relationship (Walters & Stennett, 1971). Some studies have examined only the degree of sex differentiation in mothers' or fathers' behavior toward their children. Still fewer studies have pursued the nature of the relationship between the sex-differentiated behavior of both parents and the degree of girls' and boys' achievement motivation (Safilios-Rothschild et al., 1975). For example, one study of mothers of boys and girls ages 3 to 6 found that mothers stress achievement and punish dependency more frequently in pre-school boys than girls. In general, mothers seem to accept dependency in their daughters, but not their sons. Mothers also tend to put pressure on their pre-school daughters for obedience and conformity, while they put pressure on their pre-school sons for independence and achievement (Hatfield et al., 1967). Another study confirmed these data, finding that mothers of pre-school girls are stricter about neatness, demand obedience more often, control verbal protests, and use withdrawal of love much more than mothers of pre-school boys. On the contrary, mothers of pre-school boys seem to use negative sanctions (such as deprivation of privileges) and to tolerate verbal protests more often than mothers of girls (Baumrind & Black, 1967). Hoffman (1972), in her excellent review of research on early childhood experiences and women's achievement motivation, presented findings that directly and indirectly refer to the type of independence training that girls (in contrast to boys) receive in their early years. She concluded that girls receive less effective independence training and encouragement than boys and that mothers of girls give independence significantly later to girls than to boys—a tendency that was particularly strong in the middle class (Hoffman, 1974; Collard, 1964). Not only is the dependency of girls tolerated and even encouraged by mothers, but a much greater degree of parental anxiety and protectiveness is extended to girls than to boys (Hoffman, 1972). Hoffman quotes some indirect evidence to support the fact that mothers are anxious about the independent behavior in daughters but are happy about such behavior in sons (Hoffman, 1972). Parents think of girls as more fragile, despite the greater maturity and sturdiness of the female infant (Garai & Schienfeld, 1968), and behavioral observations of infants have shown that boys are handled more vigorously than girls (Moss, 1967). Hoffman also mentions another related parental behavior, labeled "overhelp," that might hinder the development of independence in daughters. If the parent responds to the child's crying or asking for help too quickly, the child never develops the ability to tolerate frustration, to tackle problems, and to explore possible solutions. It seems that mothers tend to help girls much more often than boys when the child is faced with a difficult task (Hoffman, 1972).

Turning now to mothers' achievement-related characteristics and behaviors and their effect on women's success orientation, we find that women who are characterized by absence of the motive to avoid success (as defined by Horner) tend to have mothers who are employed in masculine occupations significantly more often than daughters who are characterized by the motive to avoid success (Anderson-Patty, 1974). Also, reviews of studies on the familial origins of achievement orientations have shown that there are two dimensions of parent-child relations that are most crucial: the "loving-rejecting" and the "casual-demanding" dimensions (Kammeyer et al., 1972). Some studies have examined the relationship between one parent's (usually the mother's) loving-rejecting or casual-demanding interaction with the daughter and the daughter's achievement motivation, but only a few studies have examined the relationship between the compound effect of both parents' interaction (Miller, 1973). Girls who were competent readers had mothers who were less affectionate and less nurturant than the mothers of girls who were poor readers. Furthermore, mothers who set high standards for their daughters' intellectual achievement had daughters who were more proficient on both the reading and arithmetic achievement tests. However, girls whose fathers stressed intellectual competence scored lower on the reading achievement test than did girls whose fathers were less concerned with their intellectual abilities. It seems, therefore, that girls' higher academic achievement is related to mothers who are less affectionate, less nurturant, and more demanding of high achievement, while girls with affectionate, nurturant, less demanding mothers have lower academic achievement (Crandall et al., 1964). Furthermore, girls who performed especially well on the reading or arithmetic achievement tests had fathers who praised and rewarded more often and who criticized and punished their general intellectual behaviors less often. However, we do not know what the combined effect of mothers' and fathers' behaviors is upon girls' scholastic achievement. Similarly, another study showed that mothers who were demanding tended to have daughters who were achievement oriented, while those who were casual tended to have daughters who were not. On the other hand, fathers who were overtly concerned tended to have daughters with lower grade point averages than those who were not (Touliatos & Lindholm, 1974).

At least three studies have looked specifically at the combinations of parental behaviors that seem to be associated with high achievement motivation in girls. All three studies found that, in general, the earlier the demands for independence are made on girls, the higher their level of achievement motivation (Berens, 1973). Strong encouragement of achievement and early demands by mothers for both achievement and independence seem to be more effective in the context of a warm and supportive relationship with the mother. The study by Berens (1973) indicates that a warm and permissive relationship with the mother, usually more characteristic of girls, also helps boys to develop achievement motivation.

Berens (1972) reports elsewhere that the socialization for high need achievement seems to be facilitated when there is a balance of interaction and support combined with controls, expectations, and achievement demands. She found, for example, that boys with low need-achievement were getting inadequate support and too much control. In fact, they received significantly much more positive interaction than either type of control. Boys with high need achievement received about equal amounts of support and control in all types of parent-child interactions and had, therefore, a balanced pattern of socialization. Girls with high need achievement received significantly more positive interaction than negative control, but overall their pattern was more balanced than was true for either of the groups with low need achievement. The important factors for socialization in achievement appear to be parental expectation and demands for achievement and independence, made at an appropriate age (in Berens' sample, around age 5, or school entrance age), coupled with positive interaction or support and a moderate amount of control (Berens, 1972). A study by Miller (1973) also concluded that among the girls whose mothers were loving and demanding and whose fathers were rejecting and casual, many had high achievement orientations. When the situation was reversed, that is, when rejecting, casual mothers and loving, demanding fathers were found, girls showed very low achievement orientations.

The development of achievement motivation in women requires a balance of maternal nurturance, affection, and restrictiveness, high demands for independence and achievement, and a certain distance from mothers, which gives girls space to explore on their own (see the comprehensive review in this area by Stein & Bailey, 1973). It seems, therefore, that there is a curvilinear relationship between the achievement behavior of girls (and to some extent boys) and the degree of maternal nurturance and affection. A high degree of affection and nurturance, which is very often directed toward girls, seems to stifle a girl's potential to stand on her own feet, to develop a self separate from that of the mother (Hoffman, 1974), and to develop an achievement motivation. A high degree of maternal nurturance and affection tends to overprotect girls and to "oversocialize" them, to use Bronfenbrenner's (1961) terminology. A moderate degree of warmth and support, combined with some punishment and distance on the part of mothers, is associated with independence and achievement-oriented behavior, probably because such a combination has a "toughening" effect that enables the girl to face difficulties and competition and to take risks. However, an extensive study of competence in pre-school children showed that at the other extreme, extensive use of coercive punishment by authoritarian parents resulted in low autonomy and achievement-oriented behavior (Baumrind, 1971).

There is some incompatibility between the development of femininity and the development of achievement motivation in girls. It has been found, for example, that the development of femininity in girls is related to parental warmth, restrictiveness, psychological forms of discipline (love withdrawal), paternal dominance, paternal masculinity, and reinforcement of feminine behaviors (Hetherington, 1967). On the other hand, the development of masculinity in boys is enhanced by maternal distance rather than warmth, which also tends to enhance achievement motivation. Thus, a high degree of maternal warmth and nurturance (especially when it involves babying, protectiveness, and other forms of holding the child close to the mother) enhances "femininity" in girls, that is, dependency, passivity, and nonassertiveness. These characteristics appear negatively related to achievement orientation (Stein & Bailey, 1973), implying that femininity is incompatible with achievement. This belief seems to be substantiated by several studies which indicate that higher overall "masculinity" scores for girls (Oetzel, 1961; Milton, 1957; Kagan & Kogan, 1970), as well as specific masculinity traits, such as aggressiveness (Sutton-Smith et al., 1964; Kagan and Moss, 1962), are related positively to various achievement measures.

Another parental behavior which seems important for the development of achievement motivation is the type of help extended to children during task performance. When parents provide some general direction for an interest in achievement tasks performed by their children and expect and permit the children (especially the girls) to perform on their own, the conditions are more conducive for the girls to develop a high achievement motivation and a low degree of anxiety than when parents provide specific help with specific tasks (Hermans et al., 1972). There are some indications, however, that parents, especially mothers, tend to help girls more with specific tasks than to give them general directions as to how the tasks could be performed. These indications may explain the development of lower achievement motivation in women.

Also, when mothers tend to be verbally demanding or intrusive, to give verbal stimulation, to criticize children for poor academic accomplishments, to restrict object experimentation, to arouse anxiety in order to make children more cautious and less exploratory, and to be emotionally and affectively close to children, this constellation of behaviors is likely to develop a high verbal ability in children, but not high nonverbal aptitudes. Nonverbal aptitudes, on the contrary, seem to develop best when the child is free to explore and experiment on his or her own. Mothers in general tend to be more restrictive in raising daughters, and it has been observed that girls usually score lower on physics achievement tests, which emphasize nonverbal skills, and much higher on verbal tests. Other studies indicate that the more a girl identifies with her mother, the less likely she is to be a high achiever. She is less likely to excel in mathematics, analytic skills, creativity, and game strategies. Plank and Plank (1954) found that outstanding women mathematicians were closer to and identified more with their fathers than their mothers. Similarly, Bieri (1960) found that females high in analytical ability tended to identify with their fathers. This may be because such identification indicates a close relationship with the father, who plays a balancing role in one socialization process, or it may simply be a positive modeling effect.

In conclusion, the development of achievement motivation, as well as the degree to which women adopt a more contemporary sex role ideology (and therefore the degree to which they do not feel restrained by traditional feminine sex role stereotypes) is contingent upon achieving a certain degree of psychological distance from families (especially mothers) and to developing a sense of individuality (Hoffman, 1974; Lipman-Blumen, 1972). Lipman-Blumen found that 83 percent of the women who reported that they admired neither parent adhered to the contemporary sex role ideology. Furthermore, women who reported that they did not try to please either parent and who sought to keep their distance were more likely to adhere to the contemporary sex role ideology than women who tried to please both parents. Lipman-Blumen (1972) also found that, of the women who reported that they were constantly criticized by both parents, 84 percent held the contemporary view. Women with the contemporary viewpoint, she reports, tended to have a critical mother, while women with a traditional viewpoint recalled having a critical father. In general, Lipman-Blumen (1972) indicates that the rejection of the maternal life pattern may force adolescent girls to seek new approaches to their own lives. It is, therefore, related to a greater tendency for women to adopt the contemporary ideology, especially when they do not admire their mothers because they regard them as unsuccessful. This, of course, was true up to now because the large majority of mothers either did not work and achieve outside the home or, when they worked, were not often satisfied with the type of work and achievements they had. In fact, they often viewed work as a necessity or an unpleasant task. Therefore, they could become only negative achievement models for their daughters. That is, daughters had to reject what their mothers had been in order to feel psychologically inclined toward achievement. As increasingly more mothers themselves have high achievement motivation, and as they work and achieve in a variety of occupations, including masculine occupations, they also act as positive achievement models for their daughters. Their daughters can admire them and identify with them and thus be propelled toward achievement. Anderson-Patty's (1974) pertinent research findings indicate that the mother's employment in masculine occupations is significantly related to the absence of the motive to avoid success in women. However, a balanced mother-daughter relationship in terms of affection, closeness, support and control, separateness and distance might always be associated with girls' development of independence, autonomy, and high achievement motivation. But separateness and a certain distance does not imply rejection or lack of warmth; it only implies a relationship between two individuals, a mother and a daughter, who both must have autonomy and space to explore and grow.

Affiliative Motive of Achievement

Some authors have examined to what extent the affiliative needs of women interfere with their achievement potentials. Hoffman (1974) writes that academic and professional women frequently allow their concern with affective relationships to interfere with the full use of their cognitive capacities. In general, there is a tendency for women in group discussion and in intellectual argument to sacrifice brilliance for rapport. There is some evidence, for example, that women who perform well academically do so in cooperative pursuit and exchanges with other students so as not to decrease acceptance by peers, while men tend to achieve much more often as "loners" (Wyer, 1967).

As we have seen in other sections of this volume, women more than men require the approval of others. This need to be approved and liked is much stronger vis-a-vis men, whom women perceive as a more salient reference group as well as more traditional than themselves with regard to sex-appropriate achievement behavior. As we shall see in chapter 11, men actually hold more traditional views about women's occupational roles and achievements. Hence, women's desire to achieve can be thwarted by their anxiety concerning evaluation and possible rejection by men. Some data, however, indicate that the desire for love and approval can also have a positive effect on women's achievement motivation. In fact, the Crandalls and others (Crandall, 1963; Crandall, 1964; Garai & Schienfeld, 1968) have suggested that achievement behavior in girls is motivated not by mastery strivings, as is true for boys, but by affiliative motives. In fact, in two different studies, nursery school and elementary school girls' achievement efforts were motivated by a desire for social approval to a greater extent than were boys' achievement efforts (Lahtinen, 1964; Tyler et al., 1962; Crandall et al., 1964).

Actually, as long as academic performance is compatible with affiliative motives, we can expect that the girls' scholastic achievement will be high (Hoffman, 1974; Wyer, 1967). For example, in elementary schools, excellence is rewarded with love and approval by parents, teachers, and peers. But in college and in professional pursuits, love is less frequently the reward for top performance; if anything, the reverse is often true. In fact, high achievers must be able to withstand the loneliness that comes with high achievement and success. The early and consistent concern of girls with social approval and love, which led Kagan (1964) to say that boys try to figure the task and girls try to figure the teacher, may be handicapping girls, since at a very early age they are concerned not so much with developing competence and skills that will enable them to master the tasks, but with pleasing the teacher or with pleasing whoever requires them to achieve.

Explanations of Success and Failure

Another set of research studies is concerned with how men and women explain success or failure and with how these explanations influence their expectations for success and failure and their persistence in tasks, regardless of success or failure. These projects also explore the interrelations among the types of explanations and achievement motivation. In general, this relationship seems so strong that Frieze (1975) raises the question of whether achievement motivation produces different types of explanations for success and failure, or whether what has been labeled "achievement motivation" is the result of certain learned patterns of explaining success and failure. Weiner (1972) adopts the latter interpretation and demonstrates that many of the behavioral differences between high and low achievement-motivated males can be parsimoniously explained by reference to their attributional tendencies.

Let us look now at the evidence on sex-differentiated expectations about success and failure and on the sex-differentiated types of explanations attributed to success or failure. Numerous studies have shown that higher expectations for personal success are held by males than by females in American society. For example, Crandall's work (1969) documents the generally low expectancies of girls and women in a variety of tasks and settings. The results consistently show that males have generally higher initial expectations than females. Moreover, when objective ability estimates are available, males tend to overestimate their future successes, while females tend to underestimate their future performance (Crandall, 1969).

Similar results were obtained by Jackaway (1974), who found that females approached achievement situations with general pessimism and lack of self-confidence and that their expectancy estimates were much lower than male expectancy estimates concerning success in different tasks. She also found that females generally underestimated their actual performance, whereas males overestimated theirs.

Other researchers have replicated Crandall's findings with a variety of age groups and tasks (Montanelli & Hill, 1969; McMahon, 1972; Small et al., 1973; Brim et al., 1969; Feather, 1969; Rychman & Sherman, 1973; Bar-tal and Frieze, 1973). A recent study found that most men expected that they would excel in a new task, whereas women almost uniformly expected that they would not. It appeared that many of the men made their expectancy decisions based on the sex role stereotype of male competence to achieve excellence and that excessive objective evidence would have to be provided to alter the high expectations of these men. Females, on the other hand, assumed incompetence to excel in a new task unless there was multiple objective evidence to the contrary and unless this objective evidence was specific to the new task. These data indicate that females assimilate the stereotypic feminine expectation of incompetence to excel while males assimilate the stereotypic masculine expectation of competence to excel (Vaughter et al., 1974). This study also proposed that the response set for verbal display of modesty is assimilated more by females, while the response set of confidence with regard to achievement-related behaviors is more often assimilated by males. This sex-differentiated assimilation of response sets may at least partially account for the sex-differentiated expectations about excelling in new tasks (Vaughter et al., 1974).

Other studies suggest that the sex role relatedness of the task must be considered in assessing expectancies about success or failure (Hoffman & Maier, 1966). The "masculine" or "feminine" label of a task has been shown to affect performance in that girls usually do better in tasks labeled "feminine" and boys usually do better at tasks labeled "masculine," even when the actual content or difficulty of the tasks is the same (Montemeyor, 1972; Milton, 1959; Stein & Smithells, 1969). Evidence suggests that not only is the actual performance of men and women different at tasks labeled as masculine or feminine, but also their expectations about performance are different and are affected by the sex appropriateness of the task (Stein et al., 1971). Finally, not only are one's own expectancies about achievement performance affected by the sex appropriateness of the task, but so are the expectations that others hold about one's performance (Deaux & Emswiller, 1975).

While the available evidence indicates that women have lower expectations about achievement and excellence than men, there are several factors which may modify and attenuate this finding. First, stereotypes about women's modesty may lead women to undervalue their abilities and expectations of achievement and may even depress their level of expectations. On the other hand, men, acting according to the masculine stereotypes, which make them self-confident and support their expectations of excelling in all situations, might overvalue their level of expectations concerning performance and excellence. Second, the labeling of a task as feminine, regardless of the difficulty involved in performing the task, tends to increase women's expectations of performance and excellence, while the reported expectations are lower for a "masculine" task.

Studies that have examined the types of explanations attributed to success and failure point out that maximum pride and security in success are derived from explanations that attribute success to internal and stable factors, such as ability (Frieze, 1975). The more one tends to attribute success to ability and failure to bad luck or insufficient effort, the higher the persistence in performing tasks and the higher the achievement motivation. After all, bad luck can always turn to good luck, and lack of sufficient effort can always be controlled by one's own will and increased appropriately to guarantee success. Currently available studies have demonstrated that high achievement-motivated men tend to explain success in terms of high ability and effort and failures in terms of lack of effort (Kukla, 1972). This lack-of-effort explanation of failure leads to a greater subsequent effort and accounts for the motivating effects that failure has on high achievement-motivated males (Weiner, 1972; Atkinson, 1964). Also, it has been found that high achievement motivation in men is usually associated with higher estimates of personal ability (Bar-tal & Frieze, 1973; Kukla, 1972). On the other hand, men with a low achievement motivation tend to explain their successes in terms of external causes (good luck rather than ability) and their failures in terms of low ability (Weiner & Kukla, 1970; Weiner & Potepan, 1970). This type of explanation of success and failure permits high achievement-motivated men to feel proud when they succeed and to be motivated to try again when they fail.

Women, on the other hand, have been found to explain success less often in terms of their own ability (McMahon, 1971; Frieze, 1973a). This finding indicates that women use luck much more often as an explanation of success than do men (Bar-tal & Frieze, 1973; Feather, 1969; McMahon, 1972). Thus, women who explain success as a result of luck rather than ability tend to feel less proud of their success and less confident about repeating that success. The tendency for women to externalize success much more than men may actually permit them to pursue success and to achieve considerably despite their possible ambivalence about success and achievement. One study, for example, has suggested that this type of externality may be a defense mechanism that is important because it allows women to achieve without perceiving their behavior as sex inappropriate (Thurber, 1972). Another study has concluded that women who exhibit the motive to avoid success perform better on a Digit Span (backwards) following easy and external control instructions, while women who do not exhibit the motive to avoid success perform better following difficult and internal control instructions (Anderson-Patty, 1974). This evidence supports the finding that externalizing success, basing it on good luck, probably permits women who fear that success may detract from femininity to perform well while feeling that they are keeping their femininity. Furthermore, by underplaying and not feeling proud about their success, women are less threatening to men who can deal better with their wives' good luck than with their ability. In the late 1960's, high-achieving wives in dual-career marriages used such explanations of success in order to maintain their marriages (Poloma, 1972).

Some studies show that women tend to internalize failure and to explain it as lack of ability (McMahon, 1971, 1972; Crandall et al., 1965; Zander et al., 1972.) Other studies, however, have failed to replicate these findings (Feather, 1969; Frieze, 1973a). The implications of these findings are serious, for when women attribute failure to lack of ability, they have little motivation to attempt tasks at which they have already failed, since lack of ability is a stable factor guaranteeing failure next time around. This type of explanation of failure, therefore, may be another important factor contributing to lower achievement expectations and lower actual achievement in women.

It is not very clear, however, to what extent the externalization of success is necessarily combined with the internalization of failure, a deadly combination for women's achievement motivation. Frieze (1975), who reviewed the literature, remarks that women who hope for success may attribute failure to lack of ability, while those who have already decided not to try and have low aspirations use luck to explain both success and failure. However, a study of high-achieving women found that they tend to explain both success and failure as results of effort expended in the pursuit of achievement, although the differences between their responses and those of low-achieving women were not always statistically significant.

It is interesting to note that even the high-achieving women, who explain their success and failure more often in terms of hard work and effort, tend to have lower estimates of their own abilities than men (Frieze, 1973a; Bar-tal & Frieze, 1973). This is a very significant finding because it shows that even high-achieving women are not as self-confident as men and lack the internalized belief about competence that men have.

Some studies have examined the underlying cause for women's achievement and performance expectations. According to traditional sex role stereotypes, men are supposed to be more active, striving, intelligent, powerful, and independent than women (Broverman et al., 1972). Furthermore, until recently, there was consistent evidence that both women and men did not expect women to perform well and to achieve highly—expectations that may have been quite influential in determining women's achievement behavior. The study by Goldberg (1968), for example, showed that women college students evaluated articles supposedly written by women lower than the same articles when they were supposedly written by men. Similar results were found by Pheterson et al. (1971), who had female subjects judge paintings. Again, the paintings presumably painted by female artists were rated lower than those presumably painted by men. However, when the women were told that the paintings had won a prize, their evaluations were equal. Supportiveness of women for other women was, however, also shown in the study by Deaux and Taynor (1973), in which men rated highly competent men higher on intelligence and general competence than comparable women, while women tended to rate competent women relatively higher on competence than comparable men. It seems, therefore, that in the 1970's women have become more supportive of other women and have higher expectations about women's competence and achievement. This may be a consequence both of greater self-confidence in women and of an awareness that women who are successful must be much better and work much harder than men. There are some indications of other changes that may affect the level of women's expectations, and studies carried out in the second half of the 1970's may show that expectations for achievement and performance are no longer influenced by sex differences.

The attribution of different types of explanations for success and failure in men and women and in high- and low-achieving individuals has important implications concerning continuation of task performance and willingness to perform difficult tasks. Crandall and Rabson (1960) found that grade school girls are more likely than boys to withdraw from threatening situations in which the probability of success is not high and to seek help from adults and peers. They also found that boys will attempt to master previously failed tasks, while girls are more apt to repeat previously successful ones. These differences were not evident at the nursery school level but were clearly present by early grade school. These findings reflect relevant sex-differentiated socialization experiences, documented in a study that observed mother-daughter interactions in task solving with 10-year-olds. The study showed that the mothers of girls who were good in mathematics or spatial relations allowed the girls to solve tasks by themselves, while the mothers of girls with good verbal skills were more intrusive, offering help, suggestions, and criticism (Bing, 1963). It seems, therefore, that mothers of daughters are more likely than mothers of sons to be intrusive and to give help with tasks. This indicates that girls learn to rely on adults for help, rather than try to cope and explore solutions by themselves.

The interpretations of girls' reactions to failure (in comparison with boys' reactions) may represent sexist assumptions. One study, for example, reported that boys tended to respond more aggressively than girls, displaying destructive and emotional responses, facial expressions, rationalization, and help-seeking behaviors. Girls, however, significantly more often than boys, tried to solve the problem alone, seeking contact and information. It is interesting to note that in this study the boys' behavior was judged more aggressive than the girls', while, in fact, the boys exhibited more destructive and emotional responses; the girls responded more rationally by trying to solve the problem alone and to seek contact and information. It was never pointed out that the girls were more constructive and rational than the boys, since such an interpretation would not be consonant with sex role stereotypes.

We can conclude that women who interpret failure as a result of lack of ability tend to be less willing to undertake similar tasks since their estimate of the probability of success and their motivation tend to be low. Also, to the extent that women adhere to sex role stereotypes, they may believe that they are not competent, they may be modest about their competence, and they may tend to withdraw from difficult tasks.

One of the very important variables that has often been overlooked in the controversy about women's achievement motivation is their intelligence. There are some indications that highly intelligent women tend to have less anxiety (and not much more anxiety than men). On the other hand, the highest level of anxiety is found in women with average or above-average, but not very high, intelligence. Also, women who are extremely high achieving are less anxious than other women and not more anxious than men (Loughlin et al., 1965). Therefore, the actual achievement of highly intelligent women may not be interfered with--partly because of their intelligence (which also tends to safeguard them from formal and informal institutional discrimination) and partly because they do not have very high levels of anxiety, even regarding success.

Phillips (1962) reports that an increase in anxiety results in lower achievement in women and that women with low anxiety tend to have much higher achievement than women with high anxiety. In general, the interactive effects of sex, age, intelligence, social class, race, and anxiety upon the actual achievement and motivation of boys and girls has been inadequately investigated. Much more research is necessary before we can obtain a clearer picture of the interrelationships between all these variables and the factors that contribute to the outcome of actual performance and achievement in different settings and under different conditions.

4. WOMEN'S EDUCATIONAL AND VOCATIONAL CHOICES

Choice Between Career and Marriage

From an early age, a woman, unlike a man, must decide the role of work and marriage in her life. She has several options:

- To have a career and not marry.
- To marry and not work.
- To combine career and marriage, trying to excel at both.
- To combine career and marriage, making compromises in both.
- To combine work and marriage, making compromises in her work.
- To combine both, making compromises in her family (by remaining childless or by marrying not the preferred man, but the one who accepts and supports her work plans).

The choice that young women make is important because it relates to all other educational and occupational plans. If women decide that marriage is preferable to a career, they may not plan to go to college and usually will not plan to go to graduate school. The type and level of their educational aspirations are limited by career or marriage plans. Many middle and upper middle class women attend and occasionally finish college because education is considered desirable for a girl. Aside from a career, education can provide adversity insurance, and many believe that educated women make better mothers.

Career and marriage decisions are important factors for women when choosing an educational field. Women not planning permanent careers do not choose professions that require long, arduous training, work continuity, or keeping up with changes, such as law, medicine, or fields that require a Ph. D. (Levine, 1968). Women without strong career commitments usually select traditional female occupations, such as nursing or elementary school education, that do not require work continuity and allow them to stop working while their children are young (Herman & Sedlacek, 1974). Recent stereotypes that designate the traditional "feminine" occupations as the most flexible and compatible with motherhood are questionable. In Europe, a profession like dentistry, which is flexible and compatible with motherhood, is considered a "feminine" occupation.

There is a continuum of career commitments for women. At one extreme are women who choose marriage and motherhood over a career, and at the other extreme are those who decide on a continuous career even if it means staying single or childless. Women who enter high-prestige, masculine occupations usually choose careers over families. (Rosen, 1973; Herman & Sedlacek, 1974; Nagely, 1971; Levine, 1968). Women who choose traditional female occupations usually have a career that requires them to make many compromises in order to raise a family (Davis & Olesen, 1965). Educational aspirations as well as attainment are also determined by the career and marriage choice that women make, since early marriage usually interrupts a woman's education (Mulvey, 1963).

There is some evidence that men also may experience some role conflict. Although men are not faced with the dilemma of choosing between marriage and career, they do face some conflicts. For example, one study (Adamek & Goudy, 1966) indicated that 40 percent of men and 29 percent of women thought that family and occupational responsibilities interfere with each other. The women's responses may be explained by the fact that these women were in home economics and education, which are fields considered to be more compatible with marriage since they do not require uninterrupted work patterns. The men viewed themselves primarily as family members and received satisfaction from their families. At least 70 percent of the men and 85 percent of the women designated the family as their primary source of satisfaction, while 22 percent of the men and 6 percent of the women chose their occupation. As dual careers become increasingly widespread and as men and women find that they must share the responsibility for household chores and childcare, the need for this kind of research becomes even greater.

Shirley Angrist (1972) conducted probably the best study of women's choices between career and marriage. Because her study was longitudinal, involving college students from the freshman year through graduation, she was able to study not only the background of the women, but also the changes in their plans throughout college. In 1969 and 1970, when the Women's Liberation Movement still had not made a significant impact, almost no woman said that she would work when she had children of pre-school age if her husband's salary was adequate (Angrist, 1972). Even women who could easily choose both work and career usually anticipated at least one interruption while their children were very young. Only 14 percent of the college students wanted to work when they had pre-school children, even if their husband's salary were adequate. About one-third of the women indicated that they planned to work when their children were grown, even with an adequate income provided by the husband (Angrist, 1972).

Even in the 1970's, after the Women's Movement had made a significant impact, most women planned either to quit work when their children were very young or to work part time (Mandle, 1975; Mason & Bumpass, 1975; Parelius, 1975). The movement has helped most college women realize that a career is compatible with marriage and motherhood, but the belief that infants must be taken care of by their mothers seems to be quite resistant to change, even among activist feminists (Mandle, 1975).

Angrist further divided her sample into "career salient" women, who consider their career the most salient aspect of their lives even though they may not necessarily work steadily, and "non-career salient" women, who place their marriage and children above their career. Using this distinction, she found that 40 percent of the freshman women in her sample began as non-career salient and remained so as seniors, while only 7 percent were career salient throughout the 4 years. The "changers" consisted of 17 percent who became non-career salient by senior year and 35 percent who changed from non-career salient by senior year and 35 percent who changed from non-career salient to career salient. Therefore, at the senior year, she found that 57 percent of the women were non-career salient and 43 percent were career salient. She also found that most changes in favor of a career were made early in the senior year. Most dramatic of the converts were the 14 percent who were firmly non-career oriented for 3 years but became career oriented as seniors (Angrist, 1972).

Almquist and Angrist (1970, 1971) further reported that career salient women more often had working mothers, tended to hold a variety of part-time summer jobs during college, selected male-dominated occupations, and were influenced more by teachers and occupational role models than by family and peers. The non-career salient women, on the other hand, more often were sorority members, dated steadily or were engaged, had mothers active in leisure pursuits, and selected traditional female-dominated occupations. They interpreted these findings to mean that career salient women, although the minority, are not socially deviant, but receive enriching influences from their families, teachers, college professors, and other work role models.

Probably the most important finding was that the non-career salient women tend to be conventional and conforming—the popular girls who date frequently, go steady, or become engaged during college. Rossi (1967) similarly reported that career-oriented women tend to be much less conventional and much more independent than marriage-oriented women. Rossi also reported that career-oriented women start dating later; date less in high school and college; have less appreciation for young children, visiting relatives, planning, and organizing; and have a consistently higher interest in reading, studying, and other solo activities. The timing of dating may be at least as important, if not more so, than the frequency (Vetter & Lewis, 1964), since delayed dating implies less concern with popularity and allows girls to use their energy and intelligence in studying and achieving.

The evidence about the socialization experiences of career-oriented girls is consistent with the evidence about the socialization experiences of high-achieving women. Both are less influenced by parents; their parents disapprove of their career orientation (Vetter & Lewis, 1964); they tend to postpone dating, engagement, and marriage; and they seem to be less concerned with approval (Herman & Sedlacek, 1974) and popularity. Therefore, both high achievement and high career orientation require strength, autonomy, and the courage to go against parental, peer, and social pressures to be sociable, "nice," and popular.

Since there are no data on these women's attractiveness, it is possible that some of them had no choice but to postpone dating, engagement, and marriage because they could find no attractive, desirable men. Therefore, they channeled their energies into achievement. It is also possible that there was an interaction between these women's high achievement orientation and their lack of interest in dating that led them to divert effort and energy from grooming and dating to scholastic pursuits.

There is some evidence that high school girls who do not conform to traditional ideals of femininity are no longer penalized by being unpopular, but date as much as as "feminine" girls (Rosen & Aneshensel, 1976). It seems, therefore, that achievement and career orientation no longer lead inexorably to loneliness and unpopularity.

There is evidence that girlfriends and boyfriends greatly influence the final choice between career and marriage (Edwards, 1969). The influence of boyfriends on young women's decisions about career and marriage as well as type of occupation is shown by research on women's perceptions of what men think about women's roles and how these opinions affect women's career decisions. Probably the most clear-cut evidence comes from a study by Hawley (1972). Hawley found that women who believe that men in general, and especially the significant men in their lives, do not use gender as a basis for evaluating behaviors usually work outside the home and have careers. On the other hand, women who believe that men evaluate behaviors according to gender tend to choose marriage instead of a career.

Another study (Matthews & Tiedeman, 1964) similarly concluded that how a woman perceives men's attitudes towards her use of intelligence is important when she plans for career and marriage. If a woman believes that men respond negatively to women who use their intelligence, she usually decides against a career. Furthermore, the study showed that women with such a perception tend to feel intellectually inferior to men. Therefore, they may adopt, perhaps defensively, a realm of their own, such as homemaking.

Another study (Vogel et al., 1974) showed that when mothers work, their children do not perceive masculine and feminine behaviors as dichotomous, but as overlapping. This study showed that working mothers serve as role models not only for daughters but also indirectly for sons, who see possible role models for their future wives. Maternal employment tends to influence how children and young adults perceive and evaluate male and female behaviors, and therefore indirectly influences their attitudes toward the compatibility of career and marriage for women (Vogel et al., 1974).

Maternal employment, however, is an insufficient factor unless combined with favorable personal consequences. It is the combination of the mother's employment with a positive attitude toward her work that facilitates the androgynous thinking of both daughters and sons. A mother's negative work experiences may reinforce her children's perception that men and women are in fact different, since the received message may be that their mother is unhappy in her work because working is inappropriate for women. This explains why some studies report that maternal employment helps young women perceive career-related achievement as "feminine" only when this employment exposes the girls to a feminine model of work competence (Baruch, 1972).

How women perceive men's attitudes toward the role of women helps determine their decisions about career and marriage. As late as 1971, the Women's Liberation Movement ideology had not affected college men; they did not favor women's employment after marriage, preferring that their wives not work unless absolutely necessary. One study (McMillin et al., 1971) showed that while 12 percent of college men preferred that their wives not work at all after marriage, only 2.7 percent of college women preferred not to work after marriage. Thirty-eight percent of college men preferred that their wives not work after children were born unless absolutely necessary; only 12.7 percent of the women had the same preference. On the other hand, 72 percent of the women wanted to work before children were born and after the children grew older, while only 40 percent of the men had the same preference. Although 7.8 percent of the women wanted to work continuously after marriage, only 3.8 percent of the men wanted their wives to do so (McMillin et al., 1971). The same data broken down by men's academic major showed that men studying business, science, and mathematics preferred the least career involvement for their wives, while education, humanities, and social science majors were more accepting of working wives (McMillin, 1972).

In the 1970's, the Women's Movement has affected men, although slowly. In 1969-70, between one-third and one-half of Ivy League college men were ambivalent toward or had rejected sex role stereotypes. About half of them would have dated intelligent, competent women who were in a "masculine" major; about half would have married intelligent, competent women who planned careers after marriage, and they were even willing to help out with some domestic and childrearing tasks. Their careers, however, would clearly take precedence over those of their wives, and they expected their wives not to work after children were born but to assume full responsibility for the children (Komarovsky, 1976).

Later on in the 1970's, 38 percent of college men accepted women's uninterrupted careers (Ahbad-Yehia, 1976) and were willing to compromise (Cummings, 1977). It seems, therefore, that women who are not constrained by "feminine" stereotypes, are intelligent, and aspire to careers increasingly will find men to date and marry without having to compromise their own aspirations.

Two studies have considered the relationship between the degree to which young women adhere to sex role stereotypes and the decisions they make about career and marriage. One study, in a sense longitudinal, examined sex role stereotypes and the career-versus-marriage decisions of women in 1969 and 1973 (Parelius, 1975). This study found that by 1969, women were overwhelmingly free of sex role stereotypes, but they still believed that the husband's occupation took precedence. But in 1973, while every item of the scale measuring sex role ideology showed an increase toward the feminist perspective, the most impressive change was that most of the respondents were willing to support occupational equality even within the family.

This change in women's sex role ideology was accompanied by a significant change in their attitude toward the career-versus-marriage dilemma. In 1969, half of the women intended to combine marriage, family, and a career, while the other half intended to work until the birth of the first child and to return to work when the children were grown. (These findings are consistent with Angrist's findings, discussed earlier.) But in 1973, there was an increase in the percentage of women who wanted to work continuously throughout their married lives and a decrease in the percentage of women who planned to interrupt their careers in order to care for children. Therefore, women who intended to combine marriage, family, and career shifted from planning an interrupted career toward planning a "double-track" pattern of concurrent work, motherhood, and homemaking (Parelius, 1975). This indicates that in 1973, by which time the Women's Liberation Movement had made a significant impact at least on college women's values, young women no longer perceived career and marriage as incompatible but planned to combine them as men have always been able to do.

Similar findings have been reported by Luria (1974), who studied the marriage and career plans of 1969 and 1970 women college graduates. Another study (Vogel et al., 1974) concluded that college women with more stereotypic self-concepts (that is, those who see themselves as warm and expressive) plan more traditional roles. Thus, they have lower educational aspirations, want to have more children, and plan to work only after their children have entered school. On the other hand, college women with less stereotypic self-concepts plan more innovative roles; they intend to enter graduate school, to have fewer children, and to work while their children are young. Thus, women who perceive themselves as being relatively less feminine are more likely to plan to combine employment with childrearing than are women who perceive themselves as relatively more feminine.

Educational Aspirations and Attainment

The first issue of concern in the area of educational aspiration and attainment is whether women's educational and occupational choices coincide or must be treated separately. The available evidence suggests a high correlation between educational and occupational choices, a correlation that is much higher among men than among women (Morrill et al., 1970). Since a considerable degree of variance is unaccounted for (in this study, approximately 50 percent), the advisability of using the two choices interchangeably is questionable. Other authors have cautioned about the differences in timing and generality between an occupational and an educational choice. For example, the choice of a career 10 years before starting to work is not the same as the choice of a high school curriculum or college program, the implications of which must be accepted at once. To say "I want to be a doctor" at age 12 is fantasy, but to say "I'm signing up for the college preparatory general program" in the 10th grade is an important choice (Dole, 1964). Thus, unless an educational choice or aspiration has definite implications for an occupational choice, it is not consistently correlated highly with occupational choice. It apparently is important to consider educational choices separately from occupational choices. This is especially true for girls for whom the correlation between the two choices seems to be weaker due to important intervening variables, such as marriage, dating, the early birth of children, and having to work to support the husband.

The educational choice involves several aspects. First, the choice of curriculum to be followed in high school and, later, in college has important cumulative and developmental implications, since early course choices can facilitate, complicate, or altogether exclude later educational choices. For example, a girl's decreasing exposure to math and science courses after the eighth grade drastically reduces her ability to take more advanced courses later on and to enter most scientific fields. Second, curriculum choices reflect level of educational aspiration. Finally, they determine the major in college.

The extent to which educational aspirations correlate with educational attainment is important, particularly to women. Through high school, the correlation is higher for girls than for boys. After high school, the discrepancy between educational aspirations and attainment is greater for women than for men, and this discrepancy increases at the graduate level. This greater incongruency for women is due to intervening variables, such as marriage, children, moving when the husband's job requires it, or the need to support a student husband.

A study of 1,249 intellectually gifted college students in Minnesota indicated another set of variables that may lower the educational aspirations and, even more, educational attainments of intelligent women (Faunce, 1968). This study showed that freshmen women who did not graduate faced problems involving impulse control, aggressive behavior, and hostile feelings. They were individualistic and nonconforming, and they had problems with their families, including conflicts with parents and siblings. They also had difficulty in getting along with peers and lacked self-confidence. They were awkward with men and had sexual adjustment problems. In contrast, women who graduated seemed more conventional, temperate, and modest. They were optimistic and self-confident, and they had adequate defenses, good ego strength, and sound psychological integration. They tried to project a positive moral and social image. These women were also characterized as cooperative, reasonable, willing to accept suggestions, clear thinking, alert, responsive, and enthusiastic.

The women who did not graduate did not fit the sex-appropriate stereotypes as reflected in their more aggressive behavior, lack of control, and hostile feelings. Their behavioral nonconformity and conflicts with peers and family suggest that they were critical, questioning, and unwilling to accept criticism and suggestions. They were discouraged and felt rejected by their peers and teachers, which led them to reject the whole college experience (Faunce, 1968). Although the relevant data are not available, it is possible that gifted women who do not fit the model of sex-appropriate behavior are "cooled out" of college, since they are not the conforming "nice" girls with whom college professors are used to interacting.

What variables are important in determining women's educational aspirations and choices? One causal model includes the variables of family, school, and sex role attitude. Testing of the model by a path analysis showed that two family variables—perceived parental pressure to academic attainment and mother's employment status—influenced daughters' educational aspirations. The type of school, coeducational or single sex, also influenced women's educational aspirations, but none of the sex role attitude items used was found to be important (Rey, 1974). The latter finding may be explained by the narrow range of items used and by the fact that sex role stereotypic beliefs now are considered conservative; therefore, liberal women would tend to reject such beliefs regardless of how they really felt.

Another causal model studied the evolution of educational aspirations from the 9th through 12th grades (Williams, 1972). It applied to men and women and included intellectual ability and academic achievement at grade 9; socioeconomic background; teachers' and parents' expectations at grade 10; peers' aspirations at grade 10; and a similar set of variables at grade 12. This model, which included a large number of variables that affect the development of educational aspirations, is much more comprehensive than Rey's.

Path analysis of panel data from 3,687 students enrolled in general academic programs at the 12th grade showed that the models for girls and boys differed. For girls, the expectations of teachers, followed by their peers' early aspirations, grade 9 academic performance, grade 11 performance, socioeconomic background, and the early expectations of their parents, are all influential. However, peers' aspirations and teachers' expectations gradually become more important than parents' expectations. It must also be kept in mind that socioeconomic background is important in the development of a girl's educational aspirations. Since there was no corresponding effect on boys, these findings suggest that education for girls is considered to be more of a luxury. Girls' intellectual ability and academic achievement help determine teachers' and parents' expectations, hence girls' educational aspirations. This suggests that education is considered appropriate and worthwhile only for those girls who are competent and achieving (Williams, 1972).

Finally, Lipman-Blumen (1972) presented a different model tested on college women in the late 1960's. This study examined in detail the effects of the relationship with both parents, especially the mother, various socialization experiences, the mother's employment status, relationships with same-sex and cross-sex peers, the girls' sex role ideology, and other factors upon their educational goals. The model is comprehensive, and even though it omits teacher- and school-related variables, makes a great contribution because it includes women's sex role ideology. Lipman-Blumen found that:

- Women with a contemporary nonstereotypic sex role ideology

48

have higher educational aspirations than women with a traditional sex role ideology.

- Women with a vicarious achievement mode tend to have low educational aspirations as well as a traditional sex role ideology, while women with a direct achievement mode tend to have higher educational aspirations and a more contemporary sex role ideology.
- Girls who have high educational aspirations and are encouraged by both parents or their mothers go to graduate school tend to have a more contemporary sex role ideology.
- Women with a contemporary sex role ideology and high educational aspirations develop a certain psychological distance from their families and a sense of individuality in adolescence. Such women do not try to please their parents and cease to admire them. They regard their parents as frustrating and, particularly the mother, as critical. However, admiration for and closeness to both parents is associated with a more traditional sex role ideology and lower educational aspirations. These findings reflect the late 1960's, when mothers were often frustrated, unhappy housewives or dissatisfied working women who served as negative achievement models. Probably this situation is now reversed.
- Women with contemporary beliefs are lonelier during adolescence than their peers, while women holding traditional sex role beliefs are less likely to be lonely. This agrees with the findings examined earlier, which indicated that women who are career oriented tend to date less, to be less popular, and to study and think by themselves. Attitudes toward dating, popularity, independence from parents, individuality, and the ability to withstand social pressures seem to be related to both high educational aspirations and a career orientation.
- Women who have a traditional sex role ideology and do not value intellectual qualities tend to marry while still in college. Women who have a more contemporary sex role ideology and value intellectual qualities tend to postpone marriage until after college (Lipman-Blumen, 1972). This finding agrees with other studies (Bayer, 1969).

A similar model applied by Stockard (1977) on undergraduate students in 1973 empirically supports Lipman-Blumen's earlier model. Stockard concluded that: (1) high family status is related to both men's and women's nontraditional attitudes toward the role of women; (2) nontraditional women tend not to use their mothers as models; (3) women who rate themselves as more like their fathers than their mothers are more likely to hold nontraditional views; and (4) women with nontraditional beliefs have somewhat distant relationships with both parents (Stockard, 1977). These findings were replicated by Tangri (1972), who concluded that women who choose nontraditional careers consider themselves similar to their fathers, but have cognitive distance from both parents.

A woman's educational aspirations are crucially affected by maternal employment. Daughters of employed mothers have significantly higher educational aspirations than daughters of nonworking women (Baumrind & Black, 1967). Lipman-Blumen's study, however, showed that although maternal employment in itself does not have any significant effect, the mother's satisfaction with homemaking does. Mothers who are dissatisfied as homemakers serve as negative models for their daughters; they tend to raise their daughters with a contemporary sex role ideology and thus high educational aspirations (Lipman-Blumen, 1972).

Another variable influencing educational aspirations is the marital plans of young boys and girls. One study of a large sample of high school students in grades 9 through 12 showed that 8 percent of the variance among girls was explained by their marital plans (Bayer, 1969). This illustrates that early marriage drastically curtails a young woman's educational and occupational aspirations and options.

Earliest Age at Which Career Versus Noncareer Choices and Occupational Choices are Made

One longitudinal study using 1st, 4th, 8th, and 12th graders described how early and by what processes young girls decide upon a career (Tyler, 1964). Tyler, using the Strong Vocational Interest Blank, showed that as early as the 10th grade there are career and noncareer girls. By the 11th grade, the distinctions were even stronger and more clear cut. By the 11th or 12th grade, scores on masculinity-femininity tests showed no difference between career and noncareer girls. At the 12th grade the only difference between career and noncareer girls was in response to the following item on the Minnesota Test: "Women's work and men's work should be fundamentally different in nature." Career girls were more likely to disagree with this statement than noncareer girls. Probably the most important finding of this study was that in 1st grade there was a significant difference between the masculinity-femininity scores of those who at the 10th, 11th, and 12th grades were distinguished as career and noncareer girls. In the 1st grade, the career group showed more masculine scores, on the average, than the noncareer group.

At the fourth grade level, the data on interpersonal relations and the personality of career and noncareer girls are of great interest. Although no differences were large enough to be statistically significant, there was a definite pattern in the direction of the mean differences. Girls in the career group were rated lower by their classmates than girls in the noncareer group on the traits most admired by children of that age (less popular, less good looking, less active, and poorer than the others). They were also rated as bossier, more restless, more talkative, and more interested in reading. Such trends suggest that the social adjustment of many girls who later on (at the 10th, 11th, and 12th grades) develop career interests may have been slightly inadequate in the 4th grade.

It seems that the development of career interest in girls may be increased by problems in their relationships with peers during middle childhood. A girl who does not consider herself to be good looking or popular may feel free to become a good student and develop an independent life. This concentration on academic success and choosing a career represents an alternative basis for success—occupational rather than social (Tyler, 1964). Of course, some girls select careers because they have outstanding talents that are encouraged. Furthermore, the study suggests that girls who do not accept traditional sex role stereotypes during the pre-school years and the first two or three grades are more likely to develop career interests. Of course, even girls who have more masculine interests and do not adhere to sex role stereotypes in their pre-school years or the first grade have conformed by the fourth grade to the traditional sex role stereotypes. But this freedom from sex role stereotypes in the earlier years permits girls to explore their inclinations without restrictions and to become interested in a career (Tyler, 1964). Whether a girl delays in accepting the feminine role and its attached stereotypic limitations affects her ability to choose a career, even though most girls eventually accept the traditional feminine role.

The review of literature by Leifer and Lesser (1975) on the age at which girls begin to make occupational choices is fairly exhaustive. One study reports that as early as age 3, boys and girls are aware of many different occupational choices as well as stereotyped male and female occupational roles. Children at that age already tend to accept the existing sex differentiation in occupations (Beuf, 1974; Meyer, 1970). Also, there is research evidence that children between ages 3 and 6 clearly show sex-differentiated patterns in career awareness and occupational choices. Girls, for example, tend to name many fewer occupations than boys, and many girls indicate that they wish to be mothers. Boys, however, rarely mention "father" as an occupation (Kirchner & Vondracek, 1973). In the same study, when children were asked what they expected to be, not what they wished to be, girls more often than boys could not suggest another occupation. When girls did give another occupation, it was often more sex appropriate than the first. These sex differences were apparent for both black and white children, although black children were generally less able to name specific adult occupations they wished to hold (Kirchner & Vondracek, 1973).

Looft (1971) reported sex-stereotyped occupational choices among first graders, and Nelson (1968) studied children in the second grade. In both studies, boys chose many more occupations than girls (18 versus 8), and more boys were able to name a second occupation. Looft (1971) also suggests that girls stop selecting alternate careers earlier than boys, since girls recognize that they cannot change their preferences easily because few jobs are open to women. Thus, girls in the elementary grades have a far narrower range of occupational choices than boys. Several studies report that boys select two to three times as many different occupations as girls and that roughly two-thirds of the girls at this age level choose either teacher or nurse (Clark, 1967; Deutsch, 1960; Nelson, 1968; Siegel, 1973; O'Hara, 1962) or motherhood.

The occupational choices of girls reflect an acceptance of traditional sex role expectations. For example, no girls expressed a desire to be a politician, scientist, lawyer, doctor, sports hero, or any other role deemed prestigious but inappropriate for women. From kindergarten through the sixth grade, girls report that women can work only in certain "feminine" occupations such as nurse, waitress, or librarian, while men are not similarly limited (Schlossberg & Goodman, 1972). In addition, girls and minority children often underestimate their own abilities to advance educationally and enter high-status professional occupations (Wylie, 1963).

Furthermore, as early as the third grade, both boys and girls clearly understand the prestige attached to various careers (DeFleur, 1963; Simmons, 1962). Their prestige rankings of specific occupations correspond highly with adults' rankings of the same occupations (Hansen & Caulfield, 1969; Simmons & Rosenberg, 1971). These perceptions are similar regardless of the children's social class or race (LeFebvre & Bohn, 1971).

The fact that girls are so aware of the prestige of occupations, coupled with their acceptance of sex role stereotypes in jobs, indicates that from an early age girls are aware of the sex stratification system and of their inferior, subordinate position within it. This awareness probably explains their tendency to underestimate their own abilities to enter high-status occupations. Thus, while boys and girls make occupational decisions at about the same age, their decisionmaking processes differ. The more prestigious a boy considers an occupation, the more likely he is to choose it. A girl's occupational preference, on the other hand, is either unrelated or negatively related to her perception of occupational prestige (Barnett, 1973; Barnett & Baruch, 1973).

One study, however, shows that while boys are aware of occupational prestige, fourth grade girls rank the professions of doctor, artist, and writer quite a bit lower than the clearly feminine occupations of nurse, secretary, and kindergarten teacher (Simmons, 1962). This "femininity" dimension in girls may operate before the development of a general prestige dimension, and it may partially explain why girls make occupational choices that lack prestige according to adult rankings, but not their own. Also, this restructuring of occupational prestige may represent an attempt to deal with the unequal, inferior status to which the sex stratification system relegates women.

Some evidence suggests that black girls have higher occupational aspirations than black boys (Barnett & Baruch, 1973), and that they are encouraged more than white girls to work full time and in higher status professions (Gump & Rivers, 1973). It was also found that lower class girls, like middle-class girls, choose predominantly feminine occupations. However, lower class girls choose secretary, an occupation never chosen by middle-class girls, and give answers like "bum," "dummy," or "mother" more often than middle-class girls (Clark, 1965). Another study showed that lower class girls more often preferred white-collar and professional occupations than did middle-class girls or lower class boys (Clark, 1967). The latter findings can be explained partially by the race of the lower class girls, 90 percent of whom were black. Finally, another study showed that lower class girls choose specific careers earlier than middle-class girls (Lee & King, 1964).

There are some indications that girls who do not make their occupational choice until the third or fourth grade and girls who make masculine choices when they are 5 to 7 years old tend to later make innovative choices, sometimes choosing masculine, high-prestige occupations.

The development of sex role attitudes tends to determine these occupational choices. Children accept these stereotypes by age 7 (Bardwick, 1971; Kohlberg, 1966; McCandless, 1969; Mischel, 1970; Mussen, 1969). The moment girls adopt the feminine stereotypes, their occupational choices are restricted. Therefore, it is crucial that girls be able to delay crystallizing sex role stereotypes. By not accepting the oversimplified form in which pre-school children see sexual stereotypes, a girl can make broader occupational choices and both boys and girls can have experiences and choose careers that are not based on sex roles (Tyler, 1964).

Fewer studies have examined adolescent shifts in occupational choices, and no studies have examined shifts in occupational choices that occur during the early school years. The few studies of shifts in occupational choices during adolescence show the greatest effect on boys' and girls' sex-inappropriate occupational choices, while sex-appropriate choices remain more constant (Carmody et al., 1972; Rosenberg, 1957; Schmidt & Rothney, 1955). Although the occupational choices of high school students change considerably from the freshman to senior years, there is some evidence that the occupational value hierarchies of high school girls do not change much. The rank order correlations for occupational values were 0.95 from 8th to 10th grade, 0.52 from 10th to 12th grade, and 0.46 from 8th to

12th grade. Thus, early concepts of occupational prestige and sex-stereotyped occupations persist into adulthood. Early occupational choices that conform to cultural definitions of sex-appropriate employment tend to be more stable than those which do not.

There is considerable research on shifts in women's occupational choices during college years. One study found no significant correlations between the plans reported by students in their freshman and senior years, a finding that held true for males, females, blacks, whites, and students of high and low socioeconomic levels (Baird, 1973). A large national study surveyed college students in their freshman year and 4 years later. The study showed that many more women than men changed majors during these years, shifting predominantly from sex-inappropriate to sex-appropriate majors (Astin & Panos, 1969). Finally, a longitudinal study by Angrist (1972) showed changes in college women's occupational choices from the freshman to the senior year. By their senior year, the women had more specific career plans: 64 percent of college seniors, 53 percent of juniors, and 52 percent of sophomores felt that they had a definite occupational plan compared with only 38 percent of freshmen. Still, 36 percent of seniors remained undecided about careers. The study also indicated that only 15 percent of the college women had consistent occupational choices throughout college, while 14 percent never made an occupational choice. The remaining 71 percent oscillated between decision and indecision. It was also found that among seniors, the most frequently chosen occupations were high school teachers and college professor, and both of these occupations were chosen more frequently by seniors than by students at any other stage. The study also indicated that 18 percent of the college students chose typical and 18 percent chose atypical fields during all 4 college years. Thus, over one-third of the students made stable choices with respect to the sex appropriateness of the chosen occupation. Many girls, however, changed from the unconventional fields by junior year; 39 percent changed from atypical to typical women's occupations by senior year, while 25 percent changed to masculine fields. Although senior women showed interest in professional work, most chose traditionally feminine professional fields (Angrist, 1972).

On the basis of her longitudinal data, Angrist concluded that college women manifest an openness to available careers. They readily and frequently change their minds about potential adult life choices. Two characteristics emerge: notions of women's roles are shifting, and respondents seem flexible and pragmatic in their aspirations for adult life.

These data indicate that intervention during undergraduate years could help young women make occupational choices that are free from stereotypic restrictions. Even in the senior year, intervention could successfully stabilize atypical occupational choices and widen the range of choices.

Considering the shifting patterns in women's occupational choices at different ages, no particular age represents the most appropriate time for effective intervention. Intervention before or shortly after age 7 (in the second or third grade) might not succeed because of later, continuous shifts in women's occupational choices especially sex-inappropriate choices. Therefore, even if early intervention were successful in helping girls make sex-inappropriate occupational choices as often as sex-appropriate ones, it is likely that those same girls would later decide on sex-appropriate careers.

Two strategies are indicated to increase occupational choices. One is to affect a girl's choice indirectly by freeing her from sex roles rather than by directly affecting the range of occupational choices. If intervention techniques successfully freed girls from sex role constraints through the age of 12 or 14, for example, they probably would be more free to consider a wider range of occupational choices, including sex-inappropriate, highly prestigious occupations. The second alternative or supplementary strategy would be to intervene at an early age, with later intervention during high school and college years to support sex-inappropriate choices.

Some researchers have examined change and continuity in women's occupational choices. One study found that among college women, the mother's employment status or the reasons why she worked did not distinguish occupational "persisters" from "nonpersisters" (Harmon, 1972). This study also reported that the history of previous choices did not differ consistently between women who persisted in their occupational choices and those who did not This agrees with other findings reported by Harmon, which show that occupational plans at age 18 do not differ between women later identified as career committed or noncommitted (Harmon, 1970). Interestingly, a lack of persistence seems to be related to being later born as opposed to first born (Harmon, 1972). First-born women are significantly more persistent in the academic majors chosen, at least with respect to sex-appropriate occupational choices such as nursing, medical technology, and social work.

Schwartz's study (1969) of "persisters" and "nonpersisters" among women who originally planned to go into medical school, although not quantitative or in any way methodologically sophisticated, found that those who decided against attending medical school usually followed other professional careers or went to graduate school, most often in nonfeminine fields. The study shows that the occupations and educational background of the parents, the birth position in the family, and high school and college academic performance did not differ in any way between those who attended medical school and those who entered other fields. The women who finally did go into medicine had often become interested in being a physician during elementary school or even earlier. However, the desire to become a doctor intensified during high school. Several of the women said someone in their family, a doctor or a nurse, had acted as a role model. At the other extreme, several women went to medical school even when their parents were against it.

Some of the women who decided against medicine said that they saw the medical profession as uninteresting and found science courses tedious. Others said that they shifted their career interest when they discovered a more exciting field. Finally, several women changed because they feared that the commitment necessary to become a physician would leave them too little time and energy for their marriage, children, or any type of personal life (Schwartz, 1969).

As Rossi (1965) wrote, although the medical profession has changed, its public image remains rooted in the past; a physician still projects the image of a dedicated man modeled on the general practitioner of "horse and buggy" days, on call night and day, 7 days a week. Few women realize the flexibility offered by some specialities as well as the different ways in which one can follow a medical career.

Factors Associated with Nonstereotypic Occupational Choices of Women

In conclusion, there is a high correlation between a women's sex role ideology and her choice of nonstereotypic occupational fields. One study reports that women who are pioneers in nonstereotypic fields (such as personnel manager, chemistry, mathematics, biology, medicine, economics, or law) are likely to refuse to give up their careers if their husbands request it and are reluctant to move for the sake of their husbands' professional advancement. Pioneers feel that their professional activities are at least as important as those of their husbands and that their husbands should help with household tasks (Nagely, 1971).

Other studies have concluded that women with a modern sex role ideology tend to make nonstereotypic occupational choices. One study found that women choosing atypical occupations hold more liberal (less stereotypic) attitudes toward women's roles in society (Karman, 1973). Hawley (1972) found that women who make nonstereotypic occupational choices perceive that the significant men in their lives believe that women can perform well in business and professional areas without jeopardizing their marriages, families, or femininity. She also found that women who chose mathematics or science felt that women should be free to compete with men in all areas, even male-dominated ones, and they felt that men thought that women who worked outside the home were more interesting than those who did not. Also, women in mathematics and science rejected the notions that men think it more important for a women to be beautiful than intelligent, that men approve of women who use feminine wiles to get their way, and that men want women to flatter them by appearing helpless. Women who felt free to choose mathematics or science had a model of femininity that allowed the widest range of educational and career choices without violation of sexual identity (Hawley, 1972).

Rand (1968) found that freshmen women who wanted careers scored significantly higher than freshmen women who wanted to be homemakers on masculine characteristics related to interest, potential, achievement, and competencies, but that they also scored higher on a number of the feminine variables. Rand concluded that career-oriented women seem to have redefined their role to include behaviors appropriate to both sexes, while homemaking-oriented women restrict themselves to the traditional feminine role. It seems that career women are "feminine plus."

On the other hand, several other studies have concluded that women who have high occupational aspirations and enter nonstereotypic careers not only have unusual motivation and intellectual ability, but also a certain toughness that enables them to withstand frequent rejection, discouragement, and subtle or overt punishment for being ambitious and entering the masculine domain (Rossi, 1970; Bachtold & Werner, 1971; Helson, 1971; O'Leary & Braun, 1972).

Similarly, Tangri (1972) found that college seniors whose occupational choices were sex inappropriate (fields in which women represent less than 30 percent of the labor force) characterized themselves as unconventional, intellectual, and deviant from the extreme feminine model. Professional and professionally oriented women, especially in nonstereotypic occupations, described themselves as nonconforming, self-reliant, flexible, self-directed, high in ego strength, and with a strong need for autonomy—a profile generally antithetical to the feminine sex role stereotype. These characteristics help women make nonstereotypic choices by enabling them to withstand rejection, punishment, and social pressure to be popular. Furthermore, these traits help women to postpone dating and marriage until they find men who approve of them and their career choices.

Some studies report that women who choose nonstereotypic occupations consistently come from higher social class backgrounds and have highly educated fathers. The same does not hold true for men (Werts, 1967; David, 1971). Another study indicated that higher class women in nonstereotypic occupations come from higher income families that had highly educated mothers (Karman, 1973). This study indicated that these women were higher achieving students, obtained better grades in high school and college, and were more theory oriented (they had a propensity for logical, analytical, and critical thinking). Also, data on cadets at the Coast Guard Academy show that significantly more women than men have fathers who would be classified as upper or upper middle class (Safilios-Rothschild et al., 1976).

Fox (1974) reported that one structural variable, the percentage of women on the faculty in different departments, is extremely important in determining whether women make stereotypic or nonstereotypic educational and occupational choices. The more women on the faculty of a particular department, the greater the percentage of women who chose to specialize in that field. However, this was not true when the women were clearly tokens. When only one woman was on the faculty, her presence often acted as a negative role model, since it accentuated the deviance of a woman in that field. When there are only one or two women faculty members, they may act as a negative role model because a number of idiosyncratic factors make them dissatisfied or unsuccessful in their careers or their lives (Fox, 1974). Women faculty members can act as positive role models only when there are enough of them to make this occupational choice appear normal to students.

Part II.

Cross-Cultural Patterns of Sex Role Socialization

5. SEX ROLE SOCIALIZATION PATTERNS IN SELECTED SOCIETIES[1]

In addition to examining research findings concerning sex role socialization patterns, available from only a limited number of societies, we shall develop a number of relevant hypotheses with respect to selected societies that deserve special interest. In studying these findings or in formulating hypotheses concerning sex role socialization patterns and consequences for women's professional roles, it is important to delineate the core factors that might bring about changes in sex role socialization.

There is some evidence that the following types of major macro-sociological changes can bring about significant changes in at least some aspects of the status of women.

(1) Major shifts in political ideologies that entail social equality as a basic principle and that specifically spell out equality between men and women. The Marxist and the Maoist sociopolitical ideologies are outstanding examples that are interpreted and implemented differently in the U.S.S.R., the various Eastern European nations, as well as Cuba and China.

(2) Major ideological changes expressed through some kind of a social movement, such as the Women's Liberation Movement in the United States or the sex role debate in Scandinavian nations.

(3) Crises, especially those creating worker shortages, such as wars, nationalist uprisings, revolutions, and guerrilla warfare (Lipman-Blumen, 1973). With the exceptions of wars, women are usually allowed to actively participate in nationalist uprisings, revolutions, and guerrilla warfare, especially when the risks are quite high and everyone willing to fight and die represents a valuable resource. In addition, the longer such crises last and the more men become involved, the more acute the worker shortages become in many vital positions and in occupations that must be filled if the society is to continue functioning. Hence, women usually are increasingly allowed to fill them.

Let us now examine the types of changes in the status of women, the extent to which they occur as a result of the stimulus factors presented, and how these changes are or may be linked to changes in sex role socialization patterns. First, in the U.S.S.R. and the Eastern European nations, all indications (and considerable evidence is available) show that women's educational and occupational options spread over a much wider range than in most other societies (Finland is an outstanding exception) (Dodge, 1966; Safilios-Rothschild, 1971; Sullerot, 1971; Barker, 1972). However, there is also a consensus that the widening of women's educational and occupational options is not related to women's greater chances for occupational upward mobility, especially to top, prestigious, power-vested, or decisionmaking positions (Sokolowska, 1965; Barker, 1972; Alzon, 1973). In addition, there has been no redefinition of men's and women's roles in the family and the society, and so women, even when they work in the same occupations as their husbands, have the responsibility for housework and childcare (Barker, 1972; Alzon, 1973; Safilios-Rothschild, 1974). In fact, Russian women spend, after work, an average 2½ to 4 hours per day in housework and childcare and 5 hours on Sunday; they work at home three times as much as their husbands, who enjoy twice as much leisure time as their wives (Barker, 1972; Alzon, 1973). Actually, for some categories of women (such as night-shift workers) sleep becomes the rarest commodity (Barker, 1972), and physical exhaustion is reported to plague all women.

---

[1] Paper presented at the American Educational Research Association Annual Meeting, Washington, D.C., April 2, 1975.

Although there are no specific research studies on sex role socialization in the U.S.S.R. or any of the Eastern European nations, it is possible to hypothesize about children's socialization messages. Children in these societies are exposed to sex stratification systems different from the one prevailing in the United States. While American children perceive that within each class there is a sex stratification system, the differences between men's and women's individual (and not derived[2]) access to income, prestige, and power become wider in the middle and upper middle classes. Children in the U.S.S.R. and Eastern European societies probably perceive a more uniform picture of a meshed social and sex stratification system: Women occupy sizable portions of the lower and lower middle strata, while men overwhelmingly dominate the higher strata.

How does the significant breakdown of sex differentiation in educational and occupational choices affect boys' and girls' sex role conceptions? And in the absence of masculine and feminine occupations, to what do boys and girls attribute the perceived social inequalities based on sex? How do boys and girls evaluate men and women when they are socialized by mothers who not only are equal to their fathers in terms of occupation and knowledge, but also make their lives comfortable and provide for all their needs? Is the self-esteem of women in these societies much higher than that of American women? And do men evaluate men and women equally? Much exciting research awaits to be carried out in this area.

Second, several societies have been affected by organized ideologies directly aimed at changing the status of women, either expressed through social movements, such as in the United States, England, Holland, Canada, and Australia, or through milder discussions leading to social policy, such as the sex role debate in the Scandinavian countries. A distinctive feature of these ideologies, loosely referred to as the women's liberation ideology, has been the goals of widening women's educational and occupational options, equalizing women's access to, and treatment in, education and employment, redefining the roles of men and women, and changing woman/woman and man/woman interpersonal relations. Because of this equal emphasis on redefining men's and women's roles and on eradicating internalized sex role stereotypes that act as psychological barriers, efforts have been made to break down the social structural, as well as the psychological, internalized barriers to sex equality. Thus, some social policy, legislation, and social pressure has aimed at diminishing the degree of sex differentiation in boys' and girls' socialization experiences in school, in readings, in media, etc. Such efforts have been more systematic and long-lasting in Sweden, where since 1962 girls and boys have been required to take the same courses in elementary school, so that boys study cooking, sewing, and childcare and girls take manual handicrafts and other "masculine" subjects (Linner, 1971). Elementary school textbooks free of sexism were already available and being used in the late sixties. In addition, legislative changes, such as the normalization of part-time work for men and women, the transformation of maternity leave into paid 6-month parental leave that can be taken in any portion by fathers or mothers, and the availability of 21 days of paid leave per year to fathers and mothers to enable them to stay home and take care of sick children, have all contributed to a partial redefinition of Swedish men's and women's roles (Safilios-Rothschild, 1974). As early as 1969, 11 percent of fathers in Gothenburg stayed home to take care of a sick child; 72 percent of the Swedish husbands shared the responsibility of "washing up" with their wives, 66 percent helped with cooking, and 63 percent helped with cleaning (Women in Sweden in the Light of Statistics, 1971).

In view of the above changes in at least some of the school socialization experiences of boys and girls and in the role models provided by mothers and fathers with regard to division of labor and responsibility in the family, it could be expected that young Swedish children would have fewer sex role stereotypes than older children, who have been less affected by recent changes. However, a study conducted in 1969 in Uppsala reported that boys and girls ages 5, 8, 11, and 15 were equally aware of and influenced by sex role stereotypes, whereas girls were aware earlier and to a greater extent than boys (Dahl, 1969). Another recent study showed that despite many structural changes, mothers still hold a double standard in their expectations of boys and girls. They tend to be much more tolerant of boys' rulebreaking and deviant behavior, while they expect girls to conform to rules and social conventions much more than boys (Some Data on Sex Role Socialization in Sweden, 1975). Interestingly, the father's role was confined to playing with children, consoling them, and taking care of them in the night.

---

[2] It must be clarified here that we are consistently talking about women's individually achieved position in stratification systems rather than the position in which they may be classified on the basis of their derived status through their husband's achievements.

Thus, it seems that even when structural changes directly affect sex role socialization patterns, the socialization outcome is not immediately modified and the extent of sex role stereotyping is not reduced. Most probably, when the Swedish children who are now 5 to 10 years old have children, a greater variety of structural changes in this area will have come about; the sex role socialization patterns may be more profoundly affected and the socialization outcome more markedly different.

Third, Lipman-Blumen's research on societies which have undergone wars as crises involving worker shortages shows that several societies have a dedifferentiation process that allows women a greater range of occupational and political options. This higher degree of women's participation in employment, occupations, and politics during wars tends to diminish after the crisis is over, but the leveling-off point is usually higher than it was before the onset of the crisis (Lipman-Blumen, 1973). The available data from Greece agree with Lipman-Blumen's data from the United States and England.

Before 1939, Greece was a traditional, rural Mediterranean society resembling the Middle Eastern and North African Arab societies in its social structure as well as its prevailing values and attitudes, especially those pertaining to the dominant cultural value of honor. The status of women was quite low in all respects: illiteracy rates for women were high; paid employment was rare; birth rates were high; women had no political rights; and the honor code was so restrictive that women were altogether deprived of freedom, including even physical mobility unless in the company of older women or their husbands, fathers, or brothers. From 1939 through 1949 an uninterrupted chain of crises took place in Greece: the Italian war; the Italian and then the German occupation, with the concurrent underground guerrilla warfare; the Communist uprising right after the end of the Second World War; and the ensuing long civil war up to 1949.

Throughout this decade, women played an increasingly active role in fighting, particularly in the underground guerrilla warfare and the civil war, both extremely risky and uncertain activities. In this decade of crisis, during which women were equally involved with men in secret organizations and guerrilla warfare groups and were risking their lives as frequently, they and others not directly involved were increasingly allowed to enroll in masculine fields, to take positions never before open to women, and to enjoy more freedom, including more sexual freedom. Probably due to the extended duration of the accumulated crises, the dedifferentiation process involved permanent structural changes that persisted and evolved after the end of the crises. Thus, beginning with 1950, when national statistics again became available, birth rates drastically declined; they continued to decline slowly but steadily throughout the fifties and sixties. The rate of illiteracy decreased drastically; women increasingly entered masculine occupations; abortion, although illegal, was practiced widely, safely, and at a low cost by all reputable physicians; and the practice of "surgical virginity" indicated that premarital sex had spread to rural and traditional urban girls who were still concerned about maintaining the facade of virginity (Safilios-Rothschild, 1969).

Although all these changes are well documented and can be attributed to the long-term dedifferentiation processes during the decade of crises, it is difficult to assess how directly they are related to changes in sex role socialization patterns. One clear-cut direct linkage can be found in the decreased birth rate, which resulted in a considerable number of one-girl or two-girl families, especially in the middle and upper middle classes in Athens and the urban areas (in which the average number of children is 1.2). In one-girl families, the girl is socialized to high achievement through her parents' high educational and occupational expectations as well as through continuous encouragement and support. These girls are expected to carry the family name (which they literally do by means of hyphenated names after marriage) and are socialized without much regard to sex role stereotypes, at least in the area of achievement (Safilios-Rothschild, 1972). Not only are they free, but they are also encouraged to enter high-prestige and high-paying occupations that will assure them a higher social position. However, there is no information on whether their freedom from sex role stereotypes in this area is accompanied by similar freedom from sex role stereotypes in other life sectors.

On the other hand, some socialization experiences of Greek girls that cannot be attributed to the decade of crises are of crucial importance for the development of high self-esteem and the freedom to achieve and grow without concern for whether their choices will make them popular with boys. The play patterns of urban middle and upper middle class girls between the ages of 8 and 13 or 14 reveal the existence of same-sex, well-organized groups that meet regularly in a park or a street to play a variety of competitive games with a similar group of girls. Winning in these games carries individual and collective prestige and may lead to a leadership position within the group; hence, competition is usually fierce. The important features of these play groups are that (1) girls are competitive and aggressive in fighting for prestige and leadership; (2) during these years girls are totally uninterested in boys, whom they find boring and a nuisance, thus resembling the adolescent psychology of American boys vis-a-vis girls; and (3) they have high esteem for the winners and the leaders, and this probably facilitates the development of high self-esteem, especially in girls who are successful and well liked in the all-girl group.

This play stage is followed by a stage during which girls slowly become interested in boys, not romantically but as companions with whom to go out socially. This social outing does not, however, take the form of dyadic dating. Instead, a *parea* is formed, that is, a group of boys and girls who do things together, like going to parties, movies, the theater, and so on. There is no pairing between individual boys and girls, and in fact such pairing is strictly tabooed. If it were to occur, the couple would be teased and laughed at and forced to withdraw from the *parea*. This type of group friendship persists through high school and goes on throughout college, although the composition of a *parea* may change, or the individual may shift from one *parea* to another. The existence of a *parea* in these girls' lives from the time they are 15 or 16 years old is of great significance since it provides them with a variety of friendly and congenial boys to dance with, to talk with, to try out thoughts on, or to go out with—of course, always in a group with other girls. The boys in the *parea* provide them with acceptance and security, which prevents them from competing with other girls for a boy's attention; instead, they share with other girls a number of boys. Thus, they do not have to mold their personalities to please and flatter the boys; on the contrary, boys and girls have a chance within the context of the *parea* to get to know each other and accept each other as they are. Because they get to know and like each other, occasionally a boy and girl who have belonged to the same *parea* for many years start dating each other in their early 20's, but always outside the context of the *parea*.

It can be hypothesized that the Greek institution of *parea* allows a girl to achieve highly in school (the public high schools are sex segregated) without feeling anxious that she may be less popular among boys and enjoy less social life because of her scholastic success. Fun, association with interesting boys, and social life are guaranteed through the *parea* regardless of the girl's intelligence or scholastic success. As a matter of fact, intelligent girls usually have a higher status in a *parea* than less intelligent ones. Thus, girls are encouraged to develop their intelligence and knowledge in order to be admired instead of "playing dumb" in exchange for popularity.

It is interesting to note that an Indian study of the friendship patterns and the social club participation of adolescent boys and girls in Calcutta shows that boys, in general, and upper middle class girls participate more often in social clubs than in dyadic friendships. Social clubs in India serve about the same social functions that the structured games and *parea* described above serve for Greek boys and girls. Thus, it was found that the Indian boys and upper middle class girls who join the social clubs and interact within this context with youngsters of their own age are socialized into competitive and coordinated group action as well as into leadership. It is not surprising, therefore, that the proportion of girls "who enter occupations, particularly those requiring universalistic and achievement-oriented dispositions, appears to be related directly to participation in age groups" rather than in dyadic friendships (Beech, 1972).

Much more cross-cultural research is needed on the various play activities as well as the variety of avenues for social contacts between boys and girls outside of dating and their consequences for girls' ability to achieve and to make marital, educational, and occupational choices.

Finally, let us consider the case of societies in which no ideological, political, or structural factors have stimulated changes in the status of women—societies characterized by a more or less rigid social stratification system. Most of the Arab societies fall in this category, with the possible exception of Tunisia, where some changes were introduced by the Government during the last decade.

In these societies, women's social inferiority is considered "natural" and inescapable, and a rigid sex stratification system is based upon religious and moral ideologies as well as "natural laws." In this societal context, sex role socialization practices and processes openly and clearly teach boys that they are the dominant, important people and teach girls subjugation to men. There are no ambiguities about who occupies what position in this sex stratification system. The message passed on to girls is also clear: There is no way to escape or to rebel against the system; they are entirely powerless. Girls are effectively socialized into the inferior role by observing their mothers cry and their fathers become angry at their mothers for having borne a girl instead of a boy. They are bossed by their brothers (regardless of their age) and even beaten by them without parental interference.

They are unequally treated with regard to food; the best is given to boys, and when there is not enough, girls are the ones left hungry. They cannot but note that all women around them have to obey men, are afraid of men, and are often mistreated by men. In addition, girls are clearly and openly told that they are not important since they are only girls and that they cannot do many things because they are girls.

Because the sex role socialization practices and processes are so clear and powerful, most girls accept their inferior position and do not challenge men's domination. Therefore, while there is blatant institutional sex discrimination, we can hypothesize that the varied types of indirect, informal, and disguised sex discrimination practiced in the United States and Scandinavian societies do not exist in Arabian societies because, in fact, there is no need for them. In the absence of informal sex discrimination, it may be hypothesized that girls who manage to escape the oppressive sex role socialization can achieve highly with few obstacles in their way, especially since institutional barriers in developing societies can be lifted on the basis of particularistic criteria. There is actually evidence that upper and upper middle class girls escape the oppressive sex role socialization because their high social status makes them valuable people. The same holds true for exceptionally intelligent or otherwise gifted girls from other social classes who often come to be recognized as such by their parents and teachers. Research, however, is needed to indicate by what mechanisms and dynamics these girls escape the oppressive sex role socialization and what aspects of this socialization they may not be able to escape.

It is evident that there is a great research gap in the area of cross-cultural studies of sex role socialization. Hopefully, the following hypotheses around which some evidence was presented in this chapter will stimulate extensive research in different types of societies.

(1) Egalitarian ideologies superimposed by the state may increase the range of women's educational and occupational options but can have little effect on sex role socialization and the degree of sex stereotyping. Sex role socialization processes and the definition of men's and women's roles are hypothesized to be affected more by sex role ideologies expressed as social movements, although tangible changes may require two or three generations.

(2) Same-sex play groups that provide girls with competitive experiences as well as acceptance and prestige for winning and/or mixed-sex friendship groups (in adolescence and early adulthood) that replace dating, singly or in combination, are hypothesized to enable girls to develop intellectually and to achieve highly without fear of loss of femininity and popularity.

(3) In societies with formalized, institutionalized patterns of sex role socialization and sex discrimination, there is no need for informal, indirect, and disguised sex discrimination. Consequently, those girls who manage to escape the sex role constraints transmitted through socialization can achieve highly and occupy important positions by being treated as exceptional cases.

Part III.

Sex Discrimination

6. SEX DISCRIMINATION IN PRIMARY, SECONDARY, AND HIGHER EDUCATION

Teacher's Gender: Who Discriminates Against Whom?

This chapter examines the hypotheses, theories, and assumptions about the effects of the teacher's gender on different aspects of scholastic achievement in boys and girls. This structural element has been singled out quite often because of great concern with the lower rate of scholastic achievement in boys than in girls, especially at the elementary school level. At that level, boys generally receive poorer grades than girls (Carter, 1952; Maccoby, 1966; Lester et al., 1972); repeat classes more often (Wall et al., 1962); are more often problems in terms of both behavior and achievement (Berlin, 1969; Kinsbourne, 1969; Caplan & Kinsbourne, 1974); score lower on scholastic achievement tests of arithmetic, reading, and verbal ability (Gates, 1961; Loughlin et al., 1965); and tend to be punished for disruptive behavior more often (Brophy & Good, 1970; Jackson & Lahaderne, 1967). Interestingly, boys' poorer scholastic achievement at the elementary school level is blamed on the teachers rather than on the boys. Would as much concern have been expressed and research done if girls had been the poor performers, or would their poorer performances have been attributed to biological inferiority?

One model proposed to explain sex differences in scholastic achievement at the elementary and high school levels can be called the "feminine" model, because it conceptualizes the school environment as "feminine" as perceived by boys and girls (Sexton, 1970; Peltier, 1968; Grambs & Waetjen, 1966; Locksley, 1974). The model's basic argument is:

- The structure of opportunities and demands in school is such that rewards are most often achieved by verbal, compliant, and introspective individuals and that punishment is received primarily by independent, energetic, and assertive individuals.
- In general, girls are verbal, compliant, and introspective, and boys are independent, energetic, and assertive.
- Girls are more likely than boys to be rewarded and boys are much more likely than girls to be punished in the school environment.
- Boys are much more frustrated than girls and consequently engage in more aggressive behavior than girls.

It is argued that in the United States the atmosphere in school is feminine because of the overwhelming presence of female teachers and feminine values. Most investigators tend to associate feminine values with female teachers and do not examine to what extent values conducive to the smooth running of any institution can be considered feminine in light of sex role stereotypes. Actually, this contention receives considerable support from research which found that student teachers prefer students described as dependent, passive, and acquiescent and react less favorably to students portrayed as independent, assertive, and active (Feshbach, 1969). Of interest is the fact that both male and female teachers assigned the highest mean preference ratings to conformist, rigid girls and the lowest ratings to independent girls. Good and Grouwns (1972) found that teachers preferred cooperative, passive students to flexible, nonconforming students. Despite evidence indicating that the tendencies of teachers to elicit feminine behaviors from both boys and girls (perhaps to make the teacher's life easier) depend on the type of elementary school or high school, some investigators maintain that elementary schools are "feminized," that female teachers are primarily responsible for this feminization, and that this sex imbalance is detrimental to young schoolchildren, particularly to boys.

Another reason for concern with the predominance of women as teachers at the elementary level has been the fact that many children either have no father or have fathers who are absent for short or long periods due to divorce, remarriage, and/or work patterns (Vroegh, 1973; Lee & Wolinsky, 1973). In general, father absence and lack of father participation in childrearing have been found to lead to lower academic achievement in both boys and girls (Blanchard & Biller, 1971; Deutsch & Brown, 1964; Hetherington & Deur, 1971). More specifically, a relationship has been found between father absence and deficits in appropriate sex role identity development in boys and girls. In turn, deficits in sex role development have been found to be related to academic achievement problems (Anastasiow, 1965; Ferguson & Maccoby, 1966; Shaw & White, 1965). No matter what theory of sex role identity development one adheres to, the father seems to be an important factor. Theoretically, then, a father substitute in the form of a male teacher in the elementary classroom would promote the development of appropriate identity in boys and girls, particularly those who experience a great deal of father absence. Energy that had been spent solving identity problems could then be directed toward achieving in the classroom (Vroegh, 1973).

Several studies, some of which are methodologically quite sophisticated, have tested the effect of the teacher's sex upon the scholastic achievement of children, particularly of boys. However, a serious methodological flaw in many of these studies has been their predominant focus on the scholastic achievement of boys and girls, that is, upon outcome rather than process. A better strategy would be to focus on behavioral processes, that is, on differentials in male and female teachers' treatment of boys and girls, and then to examine selective outcomes which bear a logical relationship to the behavioral differences between male and female teachers (Lee & Wolinsky, 1973).

The following studies have focused primarily on outcome. McFarland (1969) assigned first grade children to one of two classes. The first class combined a supervising female teacher with 26 male college juniors as student teachers, sequentially scheduled over the school year; the second class had a female supervisor and a female teacher. McFarland found that the class with the female teacher and female supervisor performed significantly better on arithmetic than the class with the male student teachers; both classes made approximately the same gains on tests of reading, personality, and sex role identification. The flaw in this study was that the only constant and experienced adult in the male student teacher group was the female supervising teacher. The male teachers were part-time, transient, inexperienced apprentices who probably played a secondary role in the group (Lee & Wolinsky, 1973).

Triplett (1968) assigned kindergarten and first grade children to either all-male sections taught by male teachers or coeducational sections taught by female teachers. Although boys in both groups had the same scholastic achievement, boys in the all-male group scored higher on tests of self-esteem and attitudes toward teachers and school. Unfortunately, this study confounded the sex of the teachers with sex-grouping procedures. As Lee and Wolinsky (1973) pointed out, one does not know if the male teacher, or the male peers, or the combination enhanced the attitudinal growth of the boys in the all-male group.

A study of 49 classrooms conducted by Clapp (1967) showed that the 19 male teachers were not more successful than the 30 female teachers in producing high reading achievement among different groups of fifth grade boys. Asher and Gottman (1972) found that fifth grade boys taught by male teachers did not show improved reading achievement over fifth grade boys taught by female teachers in either of the 2 academic years studied. Forslund and Hull (1972) studied the sixth grade classrooms of 47 male and 48 female teachers and found that boys identified more with male teachers than with female teachers, and both boys and girls perceived male teachers as more rewarding than female teachers. However, there was no significant difference in students' achievement under male and female teachers.

Lahaderne and Cohen (1972) studied 53 classrooms to determine the effects of 14 male and 39 female fifth grade teachers on a variety of measures. Most of the measures showed no teacher by sex effect; those that did show an effect generally favored the female teachers. In particular, boys and girls taught by females had higher science achievement scores and more positive attitudes toward school than students taught by males.

Brophy and Laosa (1971) compared a kindergarten taught by a husband and wife team with another taught by a female teacher. The kindergarten taught exclusively by the female teacher provided the typical feminizing environment consisting largely of materials appropriate for sociodramatic play and for arts and crafts. The other kindergarten, taught by the husband and wife team, provided a very different environment. In addition to the usual supplies, it featured equipment for large-muscle activity, such as ropes and rope ladders, an obstacle course, a fort, a workbench equipped with tools, and many other masculine-oriented items. The husband and wife split teaching duties more or less randomly, except that the husband regularly read aloud to the children, in a deliberate attempt to associate reading with the masculine role. A total of 14 boys and 20 girls in the team-taught kindergarten and 19 boys and 25 girls in the female-taught kindergarten were studied in the first year. In the second year, the numbers of students were 20 and 21, and 20 and 28, respectively. Despite the conscious efforts of the male teacher, his presence did not affect either the boys or the girls to any significant degree. There were no significant effects on measures of sex role differentiation, interests, or motivation. Children taught exclusively by the female teacher made slightly greater gains in verbal skills, and children in the other class made slightly greater gains in spatial abilities. These minor differences were probably due to differences in equipment and curriculum rather than to the presence of the male teacher. Attempts to associate reading with the male role failed; at the end of the year, the children in both classes associated books and reading with the female role.

Carter (1952) investigated grading differences in six beginning algebra classes, three of which were taught by women and three by men. The teachers were well matched in terms of certification, experience, and training. He found no significant differences in mental ability among the groups. There were no significant differences in tested algebra achievement, either within groups or among them (i.e., girls versus boys or female teachers versus male teachers). Although there were no measurable ability or achievement differences, a look at students' algebra grades indicated that female teachers gave significantly higher grades than male teachers, that girls were awarded significantly higher grades than boys, and that girls' grades were significantly higher than boys' regardless of the sex of the teacher.

In conclusion, all studies that have tried to relate the sex of the teacher to outcome variables such as student reading ability or achievement based on some kind of scholastic test have failed to show any significant relationship. The studies showed that sex differences in scholastic outcome persist whether the teacher is male or female.

Vroegh (1973) considered the effect of male teachers upon boys' academic achievement and upon different types of father presence or absence. The author hypothesized that a male teacher supplements or substitutes for the male model for boys whose fathers are totally absent or not frequently available. The study, conducted with 416 white fourth and fifth grade boys and girls in the classrooms of 14 male and 14 female teachers, does not support the popular claim that the academic problems of boys in the elementary schools are in large part due to the lack of male teachers in the classroom. The extent of the father's presence or absence did not have any effect on performance (Vroegh, 1973). The author recognized that there are some limitations to the study's conclusions. First, father presence was represented on a continuum rather than as a dichotomy of father absence or presence. Second, the generality of the conclusion is limited to the effects on children from a higher socioeconomic stratum, since 75 percent of the fathers had occupations that were predominantly classified as professional, technical, managerial, or proprietary, that is, occupations involving considerable absence as a normal part of the fathers' work obligations. Third, the study was conducted on the basis of only 1 year's intervention by a male teacher, probably too short a time for possible benefits to be evident (Vroegh, 1973).

Vroegh (1973) questioned whether specific qualities of the male teacher, in addition to his gender, might constitute an important factor in determining his effectiveness as a father substitute. Sexton (1969) also stated that not just any male will do as the appropriate model for a teacher; he proposed that strong, vigorous males are required. Good et al. (1973) questioned, but ultimately dismissed, the potential advantages of masculine teachers for the scholastic performance of boys. Of interest in this context is the fact that the image of male grade school teachers has been anything but masculine. An article by Biedenkapp and Goering (1971) attempted to enhance the image of male grade school teachers by presenting six male teachers who had starred in competitive sports, especially in football or baseball. The same study found that men employed as elementary school teachers, administrators, or supervisors had the same masculinity-femininity scores (as measured by the Strong Vocational Interest Blank and by an original test for personal characteristics) as high school social science teachers. Also, elementary school administrators were more masculine than the lower grade and music teachers, but fifth and sixth grade teachers received nearly the same scores as the administrators. The merit of high masculinity for male teachers is questionable, and the above findings are not convincing as to the "masculinity" of teachers.

We will now focus on studies that examined processes and outcomes—studies that determined whether there were behavioral differentials in the treatment of boys and girls by male and female teachers and what their effects were on boys' and girls' achievement. Carter (1952) concluded that male teachers had the same tendency to downgrade boys as female teachers, but that it was much less pronounced. Lee and Wolinsky (1973), in one of the best studies in this area, conducted a project in 18 classrooms; 6 had two

64

female teachers, 6 had a male and a female teacher, and 6 were taught by three teams, each consisting of a male and a female head teacher. The 18 classes ranged from preschool through second grade. For the interview section of the study, which had a total sample of 72 children, 3 boys and 3 girls were randomly selected from each of the 12 classrooms that had both a male and a female teacher. Each teacher and assistant teacher in the sample was observed for a total of 2 hours, and each child was individually interviewed for approximately 5 minutes by a female graduate student.

Lee and Wolinsky (1973) found that female teachers gave almost twice as many sanctions as male teachers; thus, female teachers seemed to be more evaluative in their approach to children than male teachers. However, the ratio of approval to disapproval was approximately the same for male and female teachers. Boys received about twice as many sanctions as girls; that is, boys were subject to more evaluation than girls. There was a marginally significant relationship between sex of child and type of sanction. Although boys received slightly more approval than girls, they received about 2½ times as much disapproval. In other words, girls' behavior was approved more often than disapproved, but the reverse held for boys.

Male teachers were found to be four times more evaluative toward boys than toward girls, and female teachers were slightly more evaluative toward boys. Male and female teachers were equally disapproving of boys. But male teachers were very approving of boys, and female teachers were slightly more approving of girls. Female teachers, however, were inclined to be more disapproving of boys than of girls; the reverse held true for approvals.

Only 20 percent of the female teachers' sanctions included physical contact, and it was equally distributed between boys and girls. On the other hand, male teachers used physical contact 30 percent of the time, and it was all directed at boys. It would seem that, in addition to being relatively nonevaluative toward girls, male teachers were physically reserved with them.

Female teachers made about 50 percent more leadership assignments than male teachers. There was also a significant tendency for teachers to assign leadership positions to pupils of their own sex. These data indicate that male teachers provide boys with much more leadership experience than female teachers. Considering that most teachers are women, it is perplexing that girls do not become leaders later on, since they receive an early start in leadership training. Why don't women take advantage of the leadership responsibility they are assigned by their teachers, at least in the early grades? Do female teachers continue to assign leadership roles to girls throughout high school?

Male and female teachers were equally inclined to relate to children in groups. Male teachers almost always responded to groups which the children spontaneously formed, but seldom initiated groups. Female teachers, on the other hand, initiated groups about as often as they responded to them. Female teachers initiated groups about three times as often as male teachers; male teachers were about twice as responsive to groups as female teachers. Moreover, male teachers were more inclined than female teachers to relate to same-sex groups. Thus, either male teachers approached same-sex groups more than female teachers or male teachers encouraged, intentionally or otherwise, same-sex grouping in their classrooms.

Male teachers related equally to male-and neuter-type activities; female teachers related to neuter-type activities. There was a startling tendency for teachers, regardless of their sex, not to become involved in female-type activities.

Female teachers appeared to have more salience for the children, but when boys were asked which teacher they preferred, they made a significant shift toward the male teacher; girls expressed an equal preference for male and female teachers. The majority of students thought that their teachers liked them, and there was a distinct tendency for both boys and girls to think that their male teachers liked them better than their female teachers, indicating an interaction between sex of teacher and pupil perception of positive feelings.

The students were asked two questions about whether they thought their teachers preferred boys or girls. In the abstract, children of both sexes saw female teachers as preferring girls and male teachers as having no sex preference. However, when they were asked to name their teachers' favorite student (i.e., when asked to think in concrete terms), a very different pattern emerged. Boys reported that their male teachers strongly preferred boys and attributed neutrality to their female teachers. Girls maintained that both male and female teachers preferred girls.

Sikes (1971) compared the behavior of male and female teachers toward male and female students in comparable situations. Eight male and eight female student teachers were observed interacting with junior high school students. Boys were more active in the classroom and received more teacher criticism, but they also had more of all other kinds of contacts with teachers, including positive ones. Thus, the students' sex clearly made a difference. However, only 1 of 62 measures of interaction between teacher's sex and student's sex was considered statistically significant: female teachers were more likely to seek out boys than girls for work-related contacts, presumably to check their work and give help if necessary. Other than this one significant difference, which suggests that female teachers deal with male students better than male teachers do, the findings overwhelmingly demonstrate that male teachers have precisely the same patterns of interaction with male and female students as female teachers. Male teachers do not seem to display greater sympathy or favoritism toward boys. The overall results strongly indicate that, at least at the elementary school level, sex differences in scholastic achievement and sex differences in student behaviors in schools with only female teachers cannot be attributed to a tendency of these teachers to favor girls over boys (Brophy & Good, 1970).

A similar conclusion was reached by Lee (1973), who claimed that the more severe the institutional constraints on teacher behavior, the less manifest are sex role constraints. When institutional constraints are less powerful, as in the early grades, there appears to be an interaction between sex of teacher and sex of child. This interaction is manifested by the child through her/his selective display of imitative behavior (Lee, 1973). Therefore, it seems that the sex of the teacher is a more significant operational aspect of classroom ecology in the earliest grades and that the introduction of male teachers into the elementary school would have the greatest impact on these grades. When they make a difference, male teachers seem to create a classroom atmosphere more congenial to young boys than female teachers do. In other words, male teachers tend to reinforce boys' earlier sex role socialization experiences and encourage boys' masculine sex role indoctrination, which, according to the present goals of Title IX in education, is undesirable because it tends to limit boys' range of choices.

Another set of studies was concerned with the effect of the sex of the teacher on the imitative behavior of children. The main hypothesis was that children are inclined to imitate only teachers of the same sex. Portuges and Feshbach (1972) found that third and fourth grade girls imitated filmed female teacher models significantly more than boys did. They also found a significant positive correlation between dependency and imitation in middle-class boys, suggesting that only dependent boys are inclined to imitate female teachers.

Madsen (1968) investigated the modeling value of male teachers for nursery school children. He found that young boys imitated the aggressive behavior of familiar male teachers significantly more than girls did. He also found that girls were instigated to more nonimitative aggression than boys; that is, girls translated their aggressive actions into more feminine forms. Instead of punching, hitting, and throwing a "Bobo" doll, they pushed, batted, slapped, pinched, and squashed it. Apparently children in this age range have already been socialized to an awareness that opposite-sex teachers are generally inappropriate models (Madsen, 1968). Where institutional constraints permitted (as in the early grades, when constraints are less powerful), both teachers and children seemed to be locked into sex-typed behavioral patterns. That is, teachers appeared to bias classroom conditions toward children of the same sex, and children seemed to imitate teachers of the same sex (Lee, 1973).

Although some evidence exists that male teachers, at least in the very early grades and at the pre-school level, may create a classroom atmosphere that is more conducive to boys (in that it has more masculine elements and allows more expression of aggression), no research evidence indicates that these aspects, or the fact that male teachers tend to give more leadership to boys and to evaluate them more than female teachers, are linked to any differential impact on outcomes.

Although the literature on male and female teachers' impact on students has assumed that school, as currently structured, may be dysfunctional for young boys or incompatible with their "nature," very little concern has been focused on the possible dysfunctional effects school may have on girls. Since most teachers are female and the school norms and rules followed by teachers school is compatible with the feminine socialization of girls and that girls have an easy time in school, like school, do well, and are approved and rewarded within the school environment. Recently, however, a few authors have postulated that the better a girl tends to be as a student in elementary and high school and the more she complies with the teachers' demands in order to be rewarded and approved, the more she becomes locked into her sex role and socialized to habitual modes of behaving that are essentially incompatible with autonomy, independence, and assertiveness—qualities associated with competent and effective adult functioning (Lee, 1973; Sadker & Sadker, 1972; Grambs & Waetjen, 1966).

In other words, as Lee (1973) pointed out, boys run a short-term danger because they do not accept the teacher's oppression and therefore will not satisfy her, but girls run a long-term danger because the teacher is generally too successful in making them accept their oppression in the school—an environment that encourages children to adopt as appropriate behavior a passive approach to learning. Teachers thus contribute to the "oversocialization" of girls that was begun by their parents and that is seriously dysfunctional for their long-range development.

Boys, on the other hand, manage not to devalue themselves, even when they do not achieve in school; instead, they blame the teacher and the school for their academic failure and seek alternative avenues of achievement (sports, games) to gain self-confidence. They are supported in this tendency by other growth institutions in our society that promote assertiveness, activity, initiative, and a drive toward mastery for boys, that is, behaviors which are strongly associated with effective learning. Also, boys often make accommodations with schools; that is, they develop a tolerance for punishment (it can become a badge of masculinity). They learn in spite of the institution, and ultimately they exploit official institutions of learning for certification purposes (high school diplomas, college degrees). Thus, the issue should be not whether teachers are male or female, but what negative effects the feminine norms of educational institutions have upon girls.

Sex Composition of the Classroom

Considerable concern has been expressed about evidence indicating that girls mature earlier than boys, which implies (as some authors claim) that boys probably do not catch up with girls, in terms of intellectual maturity, until late in high school or college. Several educators and social scientists have hypothesized that boys' poorer performance in elementary school is due to their having to compete with the more mature girls. They postulate that this competition considerably handicaps and frustrates boys, resulting in low scholastic achievement. Because of these concerns, several experiments have been undertaken to examine whether boys do better scholastically when they are in same-sex or mixed-sex educational settings.

Fisher and Waetjen (1966) studied eighth grade boys and girls, using performance in mathematics and English as the achievement criteria. The findings on the 199 subjects showed that differences in reading and vocabulary achievement favored pupils in the mixed-sex groups. Girls in all-girl classes were less task oriented than those in mixed-sex groups, but this pattern can be accounted for by statistically significant differences in the lecturing style of teachers in the all-boy or all-girl groups versus the mixed-sex groups. Teachers lectured and dominated the all-boy classes to a significant extent; they did this less frequently with the control (mixed-sex) classes, and least of all with the all-girl groups. Pupil classroom behavior was consistent with this trend. The all-girl classes spent a smaller percentage of their time in task performance roles than did the corresponding mixed-sex control groups. Also, there was a significant and noticeable trend for girls in the all-girl classes to prefer nonclassroom or nonacademic activities at the end of the experiment. This was interpreted to mean that these girls missed the contact with boys at an age when dating becomes salient (Fisher & Waetjen, 1966). But a more plausible explanation may be that those in all-girl classes received less teaching and less interest from teachers. If true, this highlights the discriminatory dangers of sex-segregated education.

Ellis and Peterson (1971) studied junior high school students. The students were placed in same-sex classes, but this separation was inadequate, since the students were in a same-sex class for only five-sixths of the school day (in classes such as science, mathematics, social studies, English, physical education, and home economics). Every day, students spent an hour or more in mixed-sex classes, a fact that may have greatly contaminated the findings and diminished the validity of the study. The nature of the design raises questions as to the validity of the finding that sex segregation does not make any difference in the academic achievement, self-discipline, self-concept, sex role identification, or attitudes toward school of boys or girls.

Experiments of the same type conducted in earlier grades showed that same-sex or mixed-sex groupings made a difference. In one experiment, children in grades one to three were separated into all-male and mixed-sex classes; boys in all-male classes associated reading-related items with males more than boys in coeducational classes (McCracken, 1973). The strongest and most consistent effects across grades were for items such as reader, phonics workbook, and library card, which were used in all three grades. Items used primarily in the first grade showed a strong group effect in this grade, but not in the other two grades. Thus, it appeared that boys attending an all-male school were more likely to judge school-related reading as a male activity than boys attending coeducational classes, at least during the first three grades. However, this effect is limited primarily to items actually used in school and does not generalize to other reading-related items (McCracken, 1973).

Kernkamp and Price (1972) separated first grade children into one all-boy and one all-girl group for a year. As a control, the groupings for the first grade class in the next year were coeducational. The same teachers taught the two first grade classes. Standardized test scores at the end of the year, compared with the initial group's scores, revealed that same-sex grouping had a very favorable effect on first grade boys in spelling and total reading. First grade girls, however, outperformed first grade boys in arithmetic regardless of treatment. Other findings revealed differences in classroom behavior adjustment. Girls in the same-sex group tended to be less distractible than boys and girls in coeducational classes. They also tended to be less verbally expressive and more gregarious than children in other classes. On the task-oriented dimension, the all-boy group and the girls in coeducational classes ranked significantly higher than children in the other two groups. Some more detailed qualitative data reported by teachers and counselors formed the basis of the following tentative trends that are well worth considering:

- Boys in all-boy groups wanted to have contacts with the teacher and seemed to manage academics best when they had some input in ongoing decision-making. They were very outspoken, telling the teacher frankly when they did not want to do something, and they were capable of offering good alternatives. (Boys refused to stay in a narrow channel, always communicating in their candid, insistent way that there was more than one route to follow.)

- In all-boy groups, the creativity of boys thrived within the reasonable limits set by the teacher.

- There was much physical contact between boys in the all-boy groups, such as hugs for friends and blows for boys who provoked them. The boys tended to strike out when displeased, but they used few verbal taunts and had a great deal of sympathetic understanding.

- Something seemed to happen to both boys and teachers in a coeducational setting. This change became evident during the next year, when a new group of children (boys and girls) was observed. The boys were turned off in the coeducational setting. Their quick activity and frankness often interfered with teacher goals. Their nonconformity and originality offended the girls' values of industry and conformity. Girls swiftly reacted with criticism and proscriptive remarks, and the teacher was pressured by the girls to discipline the boys. Boys' hesitancy and shyness about success with academic tasks became dramatically clear in the coeducational setting. They became easily discouraged, dropped their tasks quickly, and left their seats to socialize or investigate somewhere else in the room.

- Boys became more of a behavior problem as the girls dominated the classroom. Sometimes they were uncooperative and uncontrollable.

- Boys were less willing to work with paper and pencil and were easily bored. Girls, on the other hand, got more satisfaction from writing and made their figures and letters more carefully and legibly, a discouraging state of affairs for the boys.

- Girls insisted on conformity to higher standards of playground management. They became coercive and punitive, constantly reprimanding the boys. The teacher believed that the same boys would not have presented behavior problems and would have dealt with each other in a more honest and open way in an all-boy class.

- Boys seemed to prefer active participation and an open structure, with little concern for time except for savoring, investigating, and expressing their reactions, and they seemed to do better in all-boy groups. Girls in

> the coeducational class, on the other hand, tended to be more positively task oriented. Teacher observations suggest that these girls, with boys in the class, may have been more apprehensive about conformity and the need for more structure. They wanted the teacher to structure learning and set rules and limits.

Coeducation may indeed be a "no-no" for boys, because it has failed to adapt itself to the "natural" qualities of the male student. But educators have failed to look critically at the traditional role expectations for the female student. Coeducation may be a "no-no" for the 6-year-old girl, too. And for 4- and 5-year-olds! Instead of playing the role of little mothers and overpowering the boys, girls need encouragement to savor and explore with the abandon of boys. What is not good for boys is not necessarily good for girls either (Kernkamp & Price, 1972; Sadker & Sadker, 1973; Grambs & Waetjen, 1966).

Hurley (1964, 1965) reported that, when boys and girls in the third, fifth, and sixth grades were separated into all-boy and all-girl classes, students in the same-sex classes consistently did better than matched controls. One group of students remained in same-sex classes for both the fifth and sixth grades. In this group, the boys continued their considerable advantage over the controls in the second consecutive year, but the girls did not. Perhaps around the fifth or sixth grade, girls ages 11 to 12 start being interested in boys, and the variable of popularity becomes relevant. Hurley (1964, 1965) reported that fifth grade boys in same-sex classes were noisier, more enthusiastic, more experimental, and more imaginative than girls—a result to be expected, if the early grades have done their job of making girls "nice" and capable of learning the lesson but not learning how to learn. Boys in same-sex classes seemed less inhibited in displaying girl-type interests than boys in mixed-sex classes. Similarly, girls in all-girl groups seemed more ready to express interest in boy-type subjects and activities. They also appeared less worried about grades and about covering up deficiencies than girls in mixed-sex classes. The data on which these conclusions are based are not hard and quantifiable, but still they suggest a need to examine the potential of same-sex classes, not only for promoting academic achievement but also for freeing children of sex role stereotypes (Smith, 1972).

Finally, Strickler (1970), in a preliminary report, cited enthusiastic support among teachers, parents, and children for same-sex classes in the first few grades. His data indicated that considerably more reading games were played by boys in all-boy classes than by boys in mixed-sex classes. Some of Strickler's informal observations are intriguing:

- Several girls in the all-girls class assumed the more aggressive role usually played by boys and became more critical of mistakes made by other girls.
- In same-sex groups, girls became more active and had less regard for the "good girl" role which they usually played in a mixed-sex group.
- A "masculinized" program was appropriate for girls, too. Girls related well to male resource persons and helpers and enjoyed boy-oriented stories.

Strickler's program was designed specifically to masculinize the boys' school experience in order to foster learning and improve their perception of the school, but it seems to have had beneficial effects for girls, too.

In conclusion, when boys and girls were segregated by sex during the first three grades, some aspects of boys' scholastic performance, such as reading, improved. Sex segregation during the first grades seems to have had other beneficial effects upon boys and girls. They tended to become freed from sex role stereotypic limitations. Girls in same-sex classes were able to assume aggressive roles, to explore, and to be themselves. But when the experiments with sex segregation were conducted in higher grades, especially in the seventh or eight grade, when dating starts, significant differences were not found in scholastic performance or in sex-typed behaviors of boys or girls in same-sex or mixed-sex classes.

Institutional Sexism: Textbooks, Curriculums, Achievement Tests, and Educational Hierarchy

The content of readers, textbooks, and other educational materials is another type of structural sexism found in schools. Because of the pervasiveness of this type of sexism, it has been practically impossible to find nonsexist readers, texts, or materials (Levy & Stacey, 1973; Frasher & Walker, 1972; DeCrow, 1972; Sadker & Frazier, 1973; Taylor, 1973; Jacklin & Mischel, 1973;

Saario et al., 1972; Zimet, 1972; Weitzman et al., 1972; Grambs, 1972). This institutionalized example of sexism is not a variable but truly a constant. We will be able to investigate the differential impact of sexist versus nonsexist educational materials only after some nonsexist readers are developed and after some student groups have read only nonsexist readers, texts, and other educational materials. As a matter of fact, most current readers and other educational materials not only reflect the society in terms of sexism but even exaggerate reality by portraying society as being more sexist than it is.

Attempts to eliminate stereotypic roles in educational materials are insufficient. Graebner (1972) found that the portrayal of women's roles has not changed in elementary texts over the last decade. Fathers are still presented as the sole providers and decisionmakers for families and are involved exclusively in traditional, stereotyped male activities. Mothers are depicted virtually unanimously as homemakers and nurturers. On the rare occasions when they are portrayed as working women, they have a stereotyped "feminine" occupation. Mothers are presented as dull, ineffectual people, almost totally preoccupied with housework and shopping, incapable of solving problems, and even stupid. Other studies have shown that the portrayal of blacks, but not of men and women, has become less stereotypic (Salpunas, 1973). The few changes to texts that were made focused mainly on correcting sexist language and on improving the male-female ratio of characters rather than on correcting substantive content.

Other structural variables that, due to their prevalence, have tended to be constants are: a sexist curriculum (Sadker & Frazier, 1973; Saario et al., 1972); a sexist hidden curriculum (Sadker & Frazier, 1973); and a male-dominated educational hierarchy within each school, with men most often occupying such supervisory positions as school board member, superintendent, and principal and with women acting as teacher, especially in the lower grades (Heyns, 1972). To the extent that Title IX is implemented, we may see more schools with a nonsexist curriculum and a better hierarchical structure through balance of men and women among teachers in the lower grades and among the administrators. Thus, the sex ratio of the school hierarchy may become an important structural variable.

Another type of institutional sexism is built into achievement tests, especially mathematics achievement tests. A study of eight major achievement tests found a content bias in favor of males. The bias did not appear to be primarily a function of word choice but rather a function of a content selection that was male slanted. This selection procedure might well account for some of the sex differences in achievement obtained at different levels, especially at the high school level where girls become more aware of what constitutes sex-appropriate behavior. Tittle (1974) stated that discriminatory effects, brought about by this type of bias in achievement tests, may exist in mathematics, a subject in which girls of high school age achieve lower scores (Maccoby & Jacklin, 1974). Part of this effect may be explained by an inadvertent bias in selecting test items. Donlon (1971) reported that the mean difference between males and females on the mathematics section of the Scholastic Aptitude Test would be at least partly reduced by a change in test items. Tittle (1974) argued that the mean scores might be more nearly equal if a balance existed in the number of items that appear to favor one sex and if the number of abstract algebra items were increased.

Teachers' Sex-Differentiated Behaviors

Two very important issues concerning the role of teachers are whether or not their behaviors are sex differentiated and in what way sex-differentiated behaviors affect the scholastic achievement of boys and girls. Several investigators reported that teachers exhibit and use mechanisms that are subtly and not-so-subtly sex differentiated. For example, Levy and Stacey (1973) reported that, when teachers separate girls and boys for seating, lining up, hanging up coats, etc., they unwittingly call attention to sex distinctions and sex roles. The choice of monitors also teaches sex roles: "Girls water the plants; boys move the chairs."

Chasen (1974) found that teachers believe boys to be innately more aggressive and girls innately more passive, yet they admitted being more active in discouraging aggressive behavior in girls than in boys, thus encouraging a self-fulfilling prophecy. Similarly, teachers reported that they felt boys' muscles more frequently than girls' and told boys that they were strong more often than they told girls; but they did not seem to be aware that if boys are told they are strong and girls are not, they will tend to act accordingly. Teachers also reported that aggressive behavior in the teacher-child interaction was encouraged more in boys than in girls. Boys were actively encouraged to play in the block corner more often than girls, block play being one way to build strength. Boys were also encouraged to do woodworking, while girls were encouraged to do collage, a sedentary, passive activity.

Only 12 percent of the teachers frequently encouraged boys to play with dolls; 53 percent encouraged them sometimes; and 35 percent rarely or never did so. These responses can be contrasted with the encouragement that teachers gave boys to play with blocks and woodworking: 78 percent of the teachers said that they often encouraged boys to play with blocks, and 88 percent said that they often encouraged boys to do woodworking. Teachers also had more emotional resistance to letting boys play with dolls than to letting girls play with blocks. In general, teachers felt that there was equality of treatment of girls and boys in the classroom, and they resisted very much the implication that they may have sex stereotyped boys and girls (Chasen, 1974). Of course, this perceived equality of treatment appears to be largely a myth, analogous to the "separate but equal" myth of racially segregated Southern schools, where the teachers also believed that there was equality.

Several studies of the sex-differentiated behaviors of teachers corroborate the finding that boys tend to be criticized much more frequently than girls (DeGroat & Thompson, 1949; Lippitt & Gold, 1959) and that teachers are more likely to use a harsh tone when criticizing boys (Spaulding, 1963; Waetjen, 1962; Jackson & Lahaderne, 1971). However, several studies, which replicated the teacher tendency to be more critical toward boys, also found that the same teachers praised boys more than girls (Meyer & Thompson, 1956; Meyer & Lindstrom, 1969; Jackson & Lahaderne, 1967; Felsenthal, 1970). Other studies have thrown much more light onto the meaning of these findings. A study conducted by Lippitt and Gold (1959), in which each child was observed by two people, concluded that teachers paid more attention to social behavior than to performance behavior of low-status pupils compared with high-status pupils. Evidently, whether a student had low or high status in terms of achievement led to differential social evaluation and response on the part of the teacher, as well as on the part of classmates. The teachers' responses depended even more on whether they were interacting with a low-status girl or boy. Low-status boys tended to receive more criticism than their high-status classmates, but low-status girls received more support. Teachers were friendly slightly more often to low-status than high-status girls, but were neutral or unfriendly more often to low-status boys (Lippitt & Gold, 1959).

More recent data show that social approval, or "being nice," is an alternative to high achievement for girls, and they tend to take this option when they do not do well scholastically. Boys, on the other hand, according to what masculine stereotypes dictate, tend to react aggressively to scholastic failure and, thus, make themselves doubly unacceptable (Caplan & Kinsbourne, 1974). Girls who are low achievers but act "nice" can still please the teacher and win her approval because their behavior conforms with sex role stereotypes. In fact, unless the level of the girls' achievement is too low, they may be preferred over high-achieving and intellectually aggressive girls.

Another observation study (Brophy & Good, 1970) concluded that boys gave more correct answers but received more criticism than girls. The teachers criticized boys for whom they held low expectations much more often than girls for whom they held similar expectations and, of course, much more often than they criticized boys or girls for whom they held high expectations. Also, boys received more direct questions from the teacher than girls and they were praised more frequently when they gave correct answers.

The differential data concerning praise are surprising in view of the preponderance of criticism directed toward boys. The data suggest that teachers are generally more evaluative in responding to boys and more objective in responding to girls. Boys are praised more often for correct responses and criticized more often for incorrect responses or failures to respond (although the latter difference is not statistically significant). This last finding is of great importance because sex-differentiated behavior on the part of teachers may be responsible for placing boys under greater pressure to achieve than girls. Also, boys were found to have more interactions with the teacher than girls and appeared to be generally more salient in the teacher's perceptual field. Teachers tended to direct more evaluative comments toward boys, both absolutely and relatively.

The largest and most obvious absolute difference in evaluative comments occurred with teacher criticism and disapproval, which were directed far more frequently at boys. However, much of this difference appears to come in the form of behavioral criticism and disciplinary contacts rather than criticisms in academic performance or work-related contacts. Among boys, the difference appears attributable more to frequent disruptive behavior, which brings criticism upon them, rather than to a consistent teacher set or bias of greater criticism toward boys than toward girls in equivalent situations (Brophy & Good, 1970).

In another observational study, Jackson and Lahaderne (1967) found that boys more often than girls were actively engaged in coping with the network of rules, regulations, and routines which affect them as students. Because of this, they tended to have higher percentages of managerial interchanges with their teachers. Whenever the four teachers observed responded to instances of classroom misbehavior, they were almost always reacting to a boy. If control messages are treated as crude measures, then sixth grade boys as a group received 8 or 10 times as many messages as their female classmates. The researchers also found that another sex difference in teacher-pupil interaction was revealed in observed relationships among the three different message categories (i.e., instructional, managerial, and control messages). Boys, who were active in instructional interchanges, tended also to be active in managerial interchanges. Those same boys tended to receive more than their share of disciplinary messages from the teacher. A similar phenomenon was not apparent for girls. If boys have as many brushes with teachers as the data indicate, the teachers may find it advantageous to sidestep as many open clashes as possible. Thus, they sometimes might use instructional or managerial messages as preventive measures for averting harsher and more disruptive interchanges (Jackson & Lahaderne, 1967).

An observation study (Good et al., 1973) of seventh and eighth grade classrooms concluded that boys were much more active and interacted more frequently with the teachers. Boys were asked a higher percentage of process questions, and girls were asked a higher percentage of product and choice questions. Although the boys received both more positive and more negative contacts from teachers, proportionately more of the girls' contacts were positive. Thus, even though boys have more frequent contacts with teachers, a given contact is more likely to be negative for boys than for girls. The study found that high-achieving students were treated more favorably than low-achieving students. High-achieving males received the most favorable teacher treatment; low-achieving boys had the poorest contact patterns with teachers. Low-achieving boys were especially likely to receive high rates of teacher criticism, little teacher feedback about their academic work, and little opportunity to respond. Low-achieving girls also had a relatively poor pattern of teacher contact, but not nearly as poor as that of low-achieving boys. These findings are consistent with previously discussed trends showing boys to be more salient than girls in the classroom and to receive more frequent teacher feedback as well as more intense teacher effect. These data, as well as data reviewed earlier, underline the importance of achievement as a differentiating factor. Previous findings that boys received relatively inferior teacher treatment may have been reported because investigators failed to further divide male and female students according to level of achievement.

Martin (1972) examined why teachers interact with and criticize boys much more than girls. He found that boys who were behavior problems interacted with teachers significantly more than boys who were not behavior problems, and more than girls, regardless of their classroom behavior. The high rate of student-teacher interaction for boys found by other investigators may be characteristic of only a small percentage of problem boys. Martin (1972) also determined that teacher criticism tends to be concentrated on a small group of misbehaving boys rather than on boys in general. This research agrees with previous findings that treatment of low-achieving boys is consistently negative.

In observing teacher-student interactions in four pre-school programs, Biber et al. (1972) concluded that female teachers had more instructional contacts with girls, and that in three of the programs girls received more positive reinforcement than boys. A basic sex difference, however, existed in the number of contacts. Teachers were not more reinforcing of girls than of boys when frequency of contact was controlled. This is the only study that shows a definite tendency for female teachers to favor girls over boys in classroom interactions.

In conclusion, the available evidence shows that boys tend to have a greater amount of contact with teachers than do girls. If we take into account the findings of Jackson and Lahaderne (1967), in which the classroom environment differs quite markedly from student to student, it becomes important to specify the factors that are crucial in determining the type of environment that a given classroom provides for a given student. Jackson and Lahaderne (1967) found that some students have so little contact with the teacher that it is as if they were in a huge classroom with hundreds of students, while others have such frequent individual contact with the teacher that it is as if they were sitting in a classroom with only a handful of students. Hence, it is important to examine whether sex by itself, or in interaction with other factors, plays a crucial role in determining the kind of environment and stimulation that the classroom provides for a given boy or girl.

In examining the studies already reviewed, we clearly see that sex is a very important variable. It becomes even more meaningful to understanding the types of differentiated behaviors that teachers emit if it is combined with the degree of boys' or girls' achievement, or with the type of expectations that the teachers hold for each child.

The pattern is striking: Low-achieving boys or boys for whom the teachers hold low expectations are the "worst off," probably because low-achieving boys go against prevailing sex role stereotypes, which dictate that they must be high achievers and leaders, if they are to live up to the norms of masculinity. Therefore, teachers become the punishers of the sex-inappropriate behavior exhibited by these boys. Low-achieving boys, as we have seen, react aggressively to their failure (according to masculine stereotypes), thus making themselves even less acceptable to the teachers. The teachers criticized these boys the most, and they tended to become unfriendly and punitive toward them without trying to help or support them. However, teachers' behavior toward low-achieving girls was much more supportive and friendly, because girls' low achievement does not go against sex role stereotypes and social expectations.

At the other extreme, boys who are high achievers tend to receive the most favorable treatment by teachers, since they live up to masculine stereotypes. The same is not exactly true for high-achieving girls. Although teachers must necessarily reward girls for high scholastic achievement, they are less enthusiastic and more ambivalent because high achievement is not supposed to be compatible with femininity. Some evidence suggests that intelligent girls get poorer grades in high school when they hold a contemporary sex role ideology than when they hold a traditional one (Doherty & Culver, 1975). Therefore, if one were to rate the treatment of teachers in terms of stimulation, support, praise, and reward, the highest ratings would go to high-achieving boys, then to high-achieving girls, and then to low-achieving girls. The lowest rating would go to low-achieving boys, who represent the "Cinderellas" of the elementary school system.

Interaction Between Students' and Teachers' Sex-Differentiated Behaviors

A considerable degree of interaction exists between teachers' and students' sex-differentiated behaviors; one set of behaviors tends to reinforce the other. Before examining studies of how often students exhibit sex-differentiated behaviors or by what processes students' sex-differentiated behaviors influence the teachers' behaviors and vice versa, it is important to consider some evidence regarding biases that observers may have when studying the behaviors of schoolboys and schoolgirls.

Meyer and Sobieszek (1972) showed that observers seemed to be sensitive to what is considered sex-appropriate or sex-inappropriate behavior for boys and girls. This phenomenon may explain why observational studies of dependency showed no consistent sex differences but why dependency ratings usually showed girls to be more dependent than boys. The same investigators reported that: "If a child behaves in an exuberant, uninhibited fashion on the screen, the behavior was more likely to be labeled aggressive if the child was thought to be a girl than if it was thought to be a boy. Behaviors were especially noticed if they run counter to sex-role stereotypes." Therefore, regardless of whether or not boys and girls exhibit sex-differentiated behaviors, teachers may be more inclined to perceive sex differences in the student's behavior, since they expect them to exist. After all, it is not that difficult to single out behaviors from boys' and girls' repertories compatible with sex role stereotypes and to consistently reinforce them so that the children will eventually most often exhibit sex-appropriate behaviors. This methodological caution should be kept in mind when one examines observational data of students' sex-differentiated behaviors, especially during kindergarten and the first few grades. Because of this teacher bias, questionnaire or interview studies concerning the sex-differentiated behaviors of girls and boys probably have little validity. Observational studies may be more valid, but are probably not devoid of observer bias.

The available observational studies show that, in general, boys are much more active and interact more frequently with the teacher (Good et al., 1973; Brophy & Good, 1970; Martin, 1972). That boys seem to be much more active and to have more contacts with the teacher seems to be accounted for by the low-achieving boys, who also tend to be disruptive to the classroom routine. For example, Good et al. (1973) stated that low-achieving boys may influence the teacher's treatment of them through their aggressiveness, their inattentiveness, and their open and deviant behavior, which make teachers impatient and punitive toward them. Martin (1972) found that, in the case of second grade students, boys designated as behavior problems attracted much more attention from their teachers than girls who were considered behavior problems. It is, of course, understandable that boys would attract more attention from teachers when they are behavior problems, but it is not clear why the same pattern does not hold true for girls. Probably, girls considered to be behavior problems did not disrupt the classroom routine or display aggressiveness. Instead, they tended to exhibit passivity, dependency, and withdrawal (Martin, 1972). Their "deviant" behaviors followed sex role stereotypes and tended, therefore, to be sex-appropriate behaviors. Because the girls' behavior followed feminine stereotypes, teachers did not consider it a problem (Caplan, 1974). Problem boys have also been found to ask the teacher more questions than other boys or girls. Teachers may interact more with these boys in order to maintain control by keeping the boys' attention focused on their work and the teacher (Martin, 1972). Girls' feminine indoctrination may make their behaviors, even when they are "deviant" or reactions to scholastic failure, acceptable to teachers.

Klein (1971) provided some information concerning the nature of the influence that student behavior has on teacher behavior. Positive student behavior influenced the teachers to use positive behaviors, but negative student behavior elicited negative teacher behavior. Similar data indicating a systematic relationship between teacher behavior and student behavior have been reported (Cody, 1966; Gordon, 1966; Harvey et al. 1968; Lahaderne, 1967; Morrison, 1965). Although a correlation between these two sets of behaviors has been shown, no evidence exists to indicate a causal relationship. Other studies indicate that student behavior influences the behavior of counselors (Bandura et al., 1969; Gamsky & Farwell, 1966; Heller et al., 1963; Russell & Snyder, 1963).

Evidence points to a considerable interaction between student behavior and teacher behavior, but it is not clear whose behavior is the most important, that is, whether it is initially the teachers' sex-differentiated behaviors that account for and reinforce the students' sex-differentiated behaviors, or vice versa. Good et al. (1973) concluded that sex differences in classroom interaction patterns are mostly due to students and that teachers are primarily reacting to the sex differentials presented by boys and girls. However, no hard evidence exists to substantiate this hypothesis; probably, an interaction between the two sets of behaviors occurs. During kindergarten and the first grades, the teachers' sex-differentiated behaviors and expectations may account more for students' sex-differentiated behaviors than later on (Finn, 1972; Rist, 1970).

Many studies have focused more on the sex-differentiated behaviors of teachers than on their sex-differentiated expectations, values, and ideologies, which may be the most significant variables in determining the types of behaviors that they elicit from students. After the second grade, teachers no longer have to rely only on their expectations, attitudes, and values, but must confront boys' and girls' clear-cut sex-differentiated behaviors and accomplishments, produced in part by the teachers' sex-differentiated behaviors and expectations (Rist, 1970; Adelman, 1969; Bloom, 1971; Finn, 1972).

What evidence exists on teachers' sex-differentiated expectations and sex role ideologies? Palardy (1969) considered the effect of teachers' sex-differentiated expectations only on boys' scholastic achievement in reading ability. When first grade teachers believed that boys were far less successful than girls at learning to read, the boys achieved less (according to a standardized reading test) than a comparable group of boys whose teachers believed that boys were as successful as girls at learning to read (Palardy, 1969). Finn (1972) showed that teachers in urban schools held sex-differentiated expectations (that imply lower achievement for girls) in the case of white, but not black, children. The investigators also found that, in suburban schools in which most children were from upper middle class white families, teachers expected as much from girls as from boys (Finn, 1972). This finding confirms that upper middle class women feel more free to achieve than women from lower socioeconomic backgrounds.

Little research has been carried out on teachers' sex role stereotypes and the extent to which teachers' sex role ideology affects the scholastic performance and achievement of boys and girls. Chafetz (1974) reported a study of kindergarten, first, second, and third grade teachers in the San Antonio, Tex., area. A considerable difference was found in the extent to which teachers adhered to sex role stereotypes, but no attempt was made to construct a scale measuring sex role ideology. Instead, the teachers were given a number of statements, such as "Aggression is a biologically innate trait of males but not females," and were asked to indicate their level of agreement or disagreement with them. About one-third of the female teachers reported that occasionally, if not more often, they felt personally "compelled to act less knowledgeable than they are in order to impress a man." Two out of three teachers agreed, at least to some extent, with the assertion that "most women have only themselves to blame for not doing better in life" (Chafetz, 1974). However, this study does not indicate whether differential adherence to traditional sex role ideology influences students' scholastic behavior and, if so, to what extent.

Chasen (1974) reported considerable variation in teachers' adherence to traditional sex role ideology. For example, 46 percent of the teachers stated that boys were born more aggressive than girls and 35 percent said that girls were born more passive than boys. Again, the study did not indicate to what extent teachers who accept the traditional sex role stereotypes about boys and girls exhibit sex-differentiated behaviors in the classroom and provide sex-differentiated messages to boys and girls. Nor did the research report to what extent teachers with a contemporary sex role ideology treat boys and girls as individuals rather than as members of a class, thus allowing the children to behave independently of sex role stereotypes. Finally, one Canadian study (Ricks & Pyke, 1973) found that female teachers had the same sex role ideology as suburban housewives and that most of them (57 percent) did not feel that it was a teacher's responsibility to facilitate sex role changes. Hence, teachers tend to act as "gatekeepers" rather than as "change agents."

Research Gaps

A striking number of important gaps exist in research on sex discrimination in elementary and secondary education. Many findings about girls as well as about sex role socialization and sex discrimination processes are often incidental, since the research had focused on the scholastic performance of boys. Most crucial research gaps can currently be classified into three general areas:

- To what extent do teachers and students adhere to traditional sex role ideology and how much does this adherence influence their behavior in the classroom? More specifically, how does the degree of teachers' adherence to particular dimensions of the traditional sex role ideology influence what types of behaviors they exhibit toward boys and girls as well as the way they treat boys and girls who behave in a sex-appropriate or a sex-inappropriate manner? Studies should investigate these questions and also the links that exist between teachers' differential adherence to traditional sex role ideology and boys' and girls' scholastic achievement.

- What are the most important factors in the formation of teachers' achievement expectations? Although the students' gender is a very important factor, other student characteristics such as social class, race, ethnic status, intelligence, attractiveness, and type of personality are also salient factors. Sophisticated studies are needed to determine how these factors separately and in combination affect teacher expectations. Teachers' characteristics such as sex role ideology, authoritarianism, rigidity, conservatism, self-confidence, activism, and degree of upward social mobility must be studied in conjunction with the formation of achievement expectations. These teacher characteristics tap other prejudices besides sex prejudice and may be important in determining how teachers react to students' characteristics as well as the nature of the achievement expectations they form.

- What are the modeling effects of teacher characteristics and behaviors beyond the teacher's gender? Teachers display a range of more or less sex-typed behaviors and characteristics which probably influence students' sex typing.

Additional research should study the processes that teachers use to sample and reinforce sex-appropriate behaviors in boys and girls and the subtle or not-so-subtle processes they use to discourage sex-inappropriate behaviors. We need more detailed information concerning the dynamics involved in the many facets of teacher-student interaction and the effects of this interaction. Research should also investigate the sex role and achievement implications of schoolgirls' nonconforming behaviors in the classroom, when they are sex appropriate and when they are not sex appropriate. We need to know whether or not, under what conditions, and to what extent girls who behave as boys in terms of disrupting the class are treated the same as problem boys by teachers. Also, how do high-achieving, noncompliant, but conforming boys and girls (a combination totally ignored in literature) fare in terms of teacher treatment, grades, learning, and sex typing? Finally, what sex-inappropriate behaviors in girls, under what conditions (e.g., combined with what other characteristics in these girls), are punished with poor grades, rejection, or referral to school social workers and psychologists? Under what conditions do these behaviors benefit girls by helping them to learn how to learn instead of merely to follow school rules and learn the lesson?

No study has examined the teacher's role in influencing the level of girls' and boys' educational aspirations or occupational choices, or, in the case of goals, their decisions and aspirations to work or not to work, as well as their definitions of success. This area is well worth investigating, with regard to both elementary and high school teachers. Crucial variables in such a study would include the teachers' sex role ideology, their achievement aspirations, and their definitions of success for men and women. How do these teacher characteristics relate to girls' and boys' educational and occupational aspirations and attainment?

Another important shortcoming of most observational studies is that they focus on elementary school classrooms and, to a much lesser extent, on high school classrooms, but never on college classrooms. Similar processes may be taking place at the college level. Observational studies, in all the crucial areas suggested above, should be undertaken at the college level as well.

With the increasing assumption by women of supervisory and administrative positions in the educational system, and the introduction of nonsexist textbooks and policies into the school setting, we may be able to assess the effects of these structural variables on boys' and girls' scholastic achievement and educational and occupational aspirations. It is important to pinpoint school systems in which these changes have been implemented already and to compare them with school systems in which these changes have not yet been implemented or have been only partially implemented. As Title IX is implemented, slowly and unevenly in different schools and in different regions, cities, and neighborhoods, a variety of interventions are taking place; only some of them are carefully designed and evaluated.[1] The study by Guttentag and Bray (1976) should be a model for evaluations of nonsexist interventions because of its thorough gathering of data on students' sex role attitudes before and after the interventions. There is a need for a systematic examination of all nonsexist interventions in education (especially those in some way evaluated) so that the wealth of information about the dynamics of teachers' and students' sex typing and sex-differentiated behaviors and interactions can be tapped.

Sex Discrimination in Higher Education

Sex discrimination in higher education may be divided into two major categories: formal and informal. Formal sex discrimination may be subdivided into indirect sex discrimination and institutional sex discrimination.

Formal Sex Discrimination

Indirect sex discrimination is discrimination that takes place indirectly at one level of education because sex discrimination took place earlier in the educational process or in other life sectors such as the family. For example, women are not eligible for or do not feel qualified to pursue fields such as science or mathematics in college because discrimination processes during high school prevented them from acquiring a solid background in these fields (Flanagan, 1966). Thus, because a smaller percentage of girls follow the academic program in high school, the preclusion of some academic options is achieved without the need for direct sex discrimination against girls at the college level. Also, because high school vocational counselors and parents discourage some girls from going to college or from pursuing high-prestige, masculine occupations, there is often no need for direct sex discrimination in order to exclude women from these fields. Women have been "put in their place" earlier by other agents and processes.

Another type of indirect sex discrimination takes place because of the lack of female faculty members to serve as models for college women (Ekstrom, 1972; Sells, 1973; Holmstrom & Holmstrom, 1974; Tobias, 1971; Fox, 1974). The scarcity of women on the faculties of schools and departments is due to occupational sex discrimination, which in turn indirectly becomes educational sex discrimination. Furthermore, because sex discrimination exists in promotion, tenure, and pay patterns, the few women on the faculty are most often in the lower ranks, untenured and underpaid—facts that tend to accentuate the marginality of professional women (see chapter 7).

One important reason for women's higher dropout rate, especially from graduate school, seems to be the lack of female faculty models with whom they can identify and discuss problems, anxieties, and future plans (Sells, 1973; Bernard, 1964; Holmstrom & Holmstrom, 1974). As Tobias (1971) put it, a female professor can say, "You know, when I was your age, I was just like you," a statement that can reassure the female student that her problems and conflicts are not exceptional or grave. Up to now, the assumption has been that female professors would tend to have more positive attitudes than male professors toward female students. We may find, however, that a variety of personality and attitudinal factors, aside from gender, will increasingly tend to differentiate male and female professors' attitudes and behaviors in this area.

---

[1] For a review of these studies, see Safilios-Rothschild (1980).

The lack of female faculty models, especially in masculine fields, is a powerful factor in diverting women from these disciplines, since their absence clearly underlines the inappropriateness of the field for women. This effect can be found not only when there is no female faculty member but also when there is only one token female faculty member (Fox, 1974).

Female graduate students seem to be more sensitive to interpersonal difficulties with faculty members than male graduate students. Women also seem to be more sensitive to recognition by professors and to be deterred in their graduate work by emotional strain and self-doubts. In view of these findings, the reported bias of faculty members toward male students can be devastating to women (Holmstrom & Holmstrom, 1974).

An additional example of indirect sex discrimination in academia occurs because women are discriminated against within the family. According to several studies, fewer married women than single women enroll as undergraduate or graduate students, and married women tend to drop out of college in larger numbers than single or divorced women (Feldman, 1973; Lord, 1968). Marriage was the reason given by 42.5 percent of the women surveyed for not going to graduate school (Lord, 1968). Ludeman (1961) found that marriage during or right after high school diminished even more drastically a woman's chances of attending college. By 1977, however, women seemed to have the same chance of attending college as men, since 49 percent of freshmen were women (Magarrell, 1978).

Women who marry while in college, or right after graduation, and continue with their graduate studies do so on a part-time basis more often than married men (Feldman, 1973). The need to take up studies on a part-time basis is due to sex discrimination within the family, where women are assigned the major responsibility for the household and for childcare. Part-time attendance in graduate school constitutes a disguised type of sex discrimination with serious consequences for women. Thus, the vicious circle of sex discrimination is triggered. The birth of children to a female student or even the mere fact of pregnancy or suspected pregnancy compounds the degree of sex discrimination against women in various forms (Myers, 1964; Goodwin, 1966; Hembrough, 1966; Shoulders, 1968). Sometimes the discrimination is thinly disguised as a policy applying to pregnant students, not women! At other times, it is a direct and overt exclusion of mothers or future mothers from graduate programs, fellowships, or research assistantships (Tobias, 1971; Report of the Subcommittee on the Status of Academic Women on the Berkeley Campus, 1970).

Women's marital status often results in their being discriminated against on other grounds. Because women often must follow their husbands wherever their job or education takes them, they have to transfer credits from one university to another. In the process, they lose a considerable number of credit hours and a lot of time by having to take courses over, by having to satisfy different sets of requirements, and by having to reorient themselves to different academic milieus (Pullen, 1970; Ruslink, 1969; Shoulders, 1968; Cless, 1969). In some cases, the nature of the move may be such that women can no longer pursue their academic programs, because such programs are not offered at any of the universities within reach. Therefore, rigid policies regarding transfer of credits mainly discriminate against women.

Overt institutional sex discrimination takes place not because of prejudiced persons' actions but because discriminatory rules and processes have been built into the educational institution. Probably the best illustration of overt institutional sex discrimination was the automatic exclusion of female students from men's colleges and universities (and, of course, the automatic exclusion of male students from women's colleges). Regardless of the attitudes held by professors and administrators, the other sex was excluded because the statutes of the university required it. For many years, single-sex colleges were accepted, and when some women started complaining that their exclusion from some men's colleges constituted sex discrimination, their contention was not accepted. The courts were brought in to decide upon the validity of their claim.

An excellent account of the legal arguments and decisions in this area is provided by Shaman (1971). The issue usually arose as women complained that they could not attend the most prestigious school in their State in a field such as engineering, because it was often a men's college. Or women complained that they could not attend the local university because it was a men's college, and could not move because their husbands attended the men's college or worked in that town. Courts have been reluctant to recognize sex segregation as similar to race segregation and to outlaw sex-based admission policies at the college and university levels (Shaman, 1971). The main counterarguments presented to allegations that these policies constitute sex discrimination have been:

- Sex segregation of colleges and universities does not constitute sex discrimination because, in most cases within the same State, there is a wide range of State colleges and universities that women can attend. This is not a valid argument because the different colleges and universities vary considerably with regard to physical facilities, scope of curriculums, quality of teaching, campus atmosphere, and academic reputation. Even the better women's colleges are considered inferior to the better men's or coeducational schools (Shaman, 1971). The best known women's schools have had smaller endowments, have received a smaller share of corporate contributions (Bunting, 1961), and have had more limited facilities and smaller ranges of courses, especially in masculine fields. Thus, women have been discriminated against by having fewer high-quality educational options than men (Harris, 1970).
- The theoretical possibility of women attending schools elsewhere in the same State is limited by several factors, which make this possibility not only inconvenient, but also considerably more expensive (not being able to live at home or having to commute a considerable distance) and stressful to women who must choose between their marital life and furthering their education (Shaman, 1971; Ewald, 1971).

Whenever it could be proved to the court's satisfaction that the exclusion of women from a men's college resulted in a lower quality of education for them (because other schools in the State could not provide the same quality of education), women's exclusion was held unconstitutional. Also, sex discrimination of this type was judged unconstitutional when it could be proved that women's exclusion from a men's college imposed a stressful situation on them. Such a situation was viewed as forcing women to choose between their marital life and their education, because if they had to go elsewhere, they would harm and disrupt their lives (Shaman, 1971; Ewald, 1971).

Arguments for sex-segregated colleges and universities have continued mainly because of fears that the admission of women to men's colleges (and, to a lesser extent, the admission of men to women's colleges) might lower the quality of education offered. Of course, an unspoken reason was a reluctance to spoil the all-male atmosphere of men's colleges that men cherish and that protects them from female intruders.

An official argument given for the desirability of women's colleges was that they allowed women to achieve more freely without fear of losing the men with whom they would otherwise be competing (Jencks & Riesman, 1968). A counterargument was that a coeducational college environment has many advantages, such as providing the opportunity to relate to male classmates on other than a sexual basis (Jencks & Riesman, 1968) and forcing women to find coping techniques and to resolve any conflicts they may perceive between achievement and femininity (Shaman, 1971). No researcher has yet been able to present any valid legal or sociopsychological argument for maintaining this type of segregation. By the-mid 1970's the battle was won: Practically all single-sex colleges and universities had become coeducational.

A different type of sex discrimination involves admission policies at the undergraduate and graduate levels. Some of these practices have been blatant, such as quotas established for women in many departments, schools, and universities (Cross, 1971; Phelps, 1972; McBee & Suddick, 1974). The existence of arbitrary sex quotas most often discriminates against women because these quotas restrict the number of qualified women who can be admitted, but allow the admission of less qualified men (Cross, 1971). Quotas restrict competition for admission within each sex, women competing with women and men competing with men, and thus allow men to be admitted even when they are less qualified than some rejected women (McBee & Suddick, 1974). These quotas have been rationalized on the basis of women's higher grades in high school (or rather, on high school teachers' tendencies to give higher grades to girls) and on the basis of women's earlier admission to college. Without quotas, the argument goes, colleges would be overwhelmingly filled with women and therefore men would be "discriminated against" (Phelps, 1972; McBee & Suddick, 1974). Higher grades have been required of female than of male applicants (McBee & Suddick, 1974). McBee and Suddick (1974) examined whether differential admissions criteria by sex were justifiable. After adjusting for initial differences, high school averages, and Scholastic Achievement Test scores by means of separate regression equations for each sex, the investigators found that the use of arbitrary differing cutoff scores in a quota system was both unwarranted and discriminatory.

Because higher standards have been used in admitting women to college, women with relatively low grades have been much less likely to attend college than men with equally low grades (Werts, 1966). Medium-ability and especially high-ability girls have been less discriminated against, but low-ability girls have not had much of a chance (Walster et al., 1971). At the graduate level and in professional schools, women who were admitted had a higher undergraduate grade point average than men (Hunter, 1967). An unequal rejection rate was also found for men and women because each sex was judged separately (Ekstrom, 1972). The current trend for first-year college students to include almost an equal percentage of men and women suggests that some of these discriminatory admissions policies may no longer be in effect.

Solmon (1974) showed that, although women have generally been discriminated against by the formal admissions policies of most departments and schools, the degree of discrimination against them has been much greater in prestigious universities. When there is an abundance of highly qualified applicants men are clearly preferred by the top schools (Solmon, 1974). (The drop in college enrollments in the early 1970's may have resulted in qualified women being considered in larger numbers than previously. In fact, in the late 1970's women account for almost all 93 percent of the growth in undergraduate enrollment.) Medium-range universities favor qualified women, those who except for discrimination would have been admitted to the top schools, while low-level colleges and universities, which are forced to consider female applicants (since good male applicants have been selected by higher level universities), tend to favor women less, probably because many of the female applicants have low ability. These women are, therefore, doubly discriminated against (Solmon, 1974).

Finally, in some universities, in some fields, and for some types of financial aid, sex discrimination policies are prevalent. With the exception of professional fields, women constitute a larger share of fellowship recipients than of applicants, possibly because only top women apply (Solmon, 1974). Some types of fellowships and scholarships have been available only to men, such as athletic scholarships and Government support through the Army and Navy Reserve Officers' Training Corps (Ekstrom, 1972). Since the passage of Title IX in education and since women's integration into ROTC, NROTC, and the military academies, this overt institutional sex discrimination in financial aid has probably been eliminated. At the national level, the average financial award of any kind is much higher for men than for women (Haven & Horch, 1972). A smaller proportion of women hold part-time jobs while they are students, especially as research assistants to (predominantly male) faculty members (Solmon, 1974). That female graduate students have fewer opportunities than men to be involved in faculty research projects is discriminatory, not only because this type of financial aid is not equally available to them but also because they are cut off from a most valuable research experience. In some fields, women are appointed as teaching assistants less often than men because of a reluctance to have women teach male students (Solmon, 1974). In some cases, university policy has disqualified pregnant women from holding a research assistantship. This type of overt sex discrimination has been practically eliminated.

In many cases, fellowships were not granted to female students whose husbands earned an adequate income. The latter policy compounded the problems of middle-class and upper middle class married women who attended graduate school despite grudging husbands, who resented the loss of comfort a housewife provides and who had to pay not only for childcare (or a housekeeper) but also for the wife's tuition. This policy would not have been discriminatory if it had been applied equally to men. But men are granted fellowships regardless of the income level of their working wives (and at least some of them have professional wives). It is not known whether the type of sex discrimination has been eliminated.

Certain trends are revealed when the above evidence concerning admissions and financial aid policies for women is examined in relation to women's college attendance probabilities by socioeconomic status and ability. Women's chances of attending college are determined by a combination of their social class background and their ability. Women of low socioeconomic status have the same chance as men only when they have high scholastic ability ("A" grade average in high school); women of high socioeconomic status have the same chance as men even if they have medium-high scholastic ability ("B" grade average). Only when women drop below this ability level are their chances lower than those of men (Werts, 1968). Thus, women of low socioeconomic status and medium or low ability are the most discriminated against in terms of college attendance, partly because of less parental encouragement and psychological and financial support and partly because of admission policies. These are the same women who, if they make it to college, may have less chance of obtaining fellowships or other financial aid. We do not know if this trend was modified with the upsurge of women's college enrollment in the late 1970's.

Disguised institutional sex discrimination refers to policies that do not appear to discriminate against women because they refer to a "universalistic" criterion, such as age, full-time status, residency requirements, or rules about transferring credits. All these criteria, though apparently unrelated to the student's gender, are in fact related to it. Because of prevailing sex role stereotypes and sex discrimination in the familial milieu, significantly more female students (especially at the graduate school level) than male students are 35 years or older; attend college on a part-time basis; have to transfer several times because of their spouses' moves; and need more time to complete the requirements for a degree. The existence of a more or less formal age limit of 35 years for admission to many universities constitutes a disguised form of sex discrimination because many more women than men apply to college, especially to graduate school, after that age (Lyon, 1964; Randolph, 1965; Blackwell, 1963). Similarly, some types of financial aid (e.g., some fellowships) are seldom or never available to older students (Hunter, 1967).

The requirement of full-time study in most graduate programs and professional schools, ostensibly a universal rule, hits female students much harder than male students (Hembrough, 1966; Cless, 1969; Bunting et al., 1970; Riesman, 1965; Myers, 1964). Because of this rule, many women cannot become physicians or lawyers, cannot qualify for Ph. D. programs, or have to postpone these plans, at least until their family responsibilities permit them to pursue full-time study—at which time they are often discriminated against because of their age. Even if they are admitted on a part-time basis, women are discriminated against because often part-time students do not qualify for internships, fellowships, scholarships, and other types of financial aid (Kayden, 1970; Ekstrom, 1972).

Finally, although rules about transferring credits or accepting transfer students apply to all students, they discriminate against women because women are predominantly affected by them (Pullen, 1970; Ruslink, 1969; Shoulders, 1968; Cless, 1969). Similarly, rules about time requirements often discriminate against women because of their subordinate and overburdened position within the family (Ekstrom, 1973).

Informal Sex Discrimination

This type of sex discrimination results from the prejudiced attitudes of individual professors and administrators who may discriminate on the basis of gender subtly or overtly, not because they are obliged to do so by institutional rules and policies but because of their own values and beliefs. As a matter of fact, their behavior may sometimes be in clear contradiction to the official philosophy and principles of the university. Probably, as more male and female administrators and professors free themselves of sex role stereotypes, informal sex discrimination will become less common.

Because most types of informal sex discrimination are subtle and frequent, if not everyday, occurrences, they can be stressful and irritating and even drive a woman out of a professional or masculine field or out of a Ph. D. program. Very often, male faculty attitudes translate into "severe psychological harassment and intimidation" or humiliation for female students (Beckman, 1970; Campbell, 1973). Women are belittled (Beckman, 1970); ignored, even when they represent 25 percent of the student body; spotlighted with irony, amusement, or anger; stereotyped; or rejected as intellectual beings (Campbell, 1973).

A pilot study conducted at Berkeley (Sells, 1973) showed how effective these more subtle and informal sex discrimination practices can be. They seem to constitute the underlying reason for women dropping out of graduate school in higher proportions than men. The study showed that female graduate students reported significantly less often than men that they were treated as colleagues or apprentices by their professors in the following fields: psychology, anthropology, the biological sciences, sociology, history, English, and mathematics. The difference was not significant in chemistry and physics (Sells, 1973). In those fields, sex discrimination may be balanced by the fact that some of the women are more outstanding than most of the men so that professors invest time and energy in them despite the fact that they are women. While the differences in the early years were not significant (Sells, 1973), many more female than male students in the advanced years of graduate school (fourth year or more) reported that they were not taken seriously by their professors. The closer women come to academic accomplishments that enable them to compete with men, the more they receive informal sex discrimination aimed at discouraging and belittling them.

Thus, female students are not encouraged, guided, and adopted as proteges by predominantly male faculty as male students are (Randolph, 1965). They are subjected to a multitude of negative attitudes of different types and intensities. Of course, sometimes the sponsorship system crosses sex lines (Husbands, 1972), but then it is often mixed with other motives, such as explicit or latent sexual attraction. Cross-sex intellectual relationships may not be as challenging as same-sex ones because of potential sexual attraction and because of the danger of behaving according to sex role stereotypes, which would destroy the professional relationship (Husbands, 1972).

Informal sex discrimination techniques are probably more prevalent within masculine fields, where women still constitute a relatively small minority, rather than within the graduate programs of feminine or "neutral" fields or within feminine professional schools (e.g., nursing and occupational and physical therapy). There are exceptions, but not enough systematic research is available for us to make clear distinctions. Nor do we know the "tipping point" (in terms of the percentage of female students) after which professors no longer discriminate against women. Research on these matters would provide important information as to the appropriate mix of male and female students necessary for the elimination of informal sex discrimination.

7. OCCUPATIONAL SEX DISCRIMINATION

The literature on occupational sex discrimination can be described in a typology similar to the one appropriate to sex discrimination in higher education. In addition, the distinction between access sex discrimination and treatment sex discrimination is useful (Terborg & Ilgen, 1974; Levitin et al., 1971).

Overt Institutional Sex Discrimination

There is no need to specifically document that women have been overtly and consistently excluded from the most prestigious, highest paying, masculine occupations. Until recently, the religious and military occupations were closed to women, regardless of the idiosyncratic prejudices of employers. And now that women have been admitted to military academies, they are still barred from combat as well as from serving aboard ships and are, therefore, cut off from the important upward mobility avenues. Antinepotism rules have served the same function in academia and industry, although this type of institutional policy is thinly disguised as a universalistic rule (Simon & Rosenthal, 1967; Dinerman, 1971). Women have, thus, been effectively excluded from academic positions and a variety of professional and industrial positions because they had the unlucky idea of marrying someone in the same field.

While limited access to women was institutionalized in other masculine prestigious occupations, there was usually room for exceptions when the woman was outstanding, unusually persevering, or a personal acquaintance of the employment gatekeeper, or when the gatekeeper was not prejudiced against women and was willing to put his beliefs into action. For example, a study of deans, chairmen, and faculty members showed that when the qualifications were equal, a male candidate was chosen; only when the woman was clearly superior was she offered the job (Simpson, 1970). Similar findings were reported from a study of psychology chairpersons, in which not only hiring but also the level at which a Ph. D. would be offered a position depended at least as much on the person's sex as on the person's academic achievements (Fidell, 1970). A similar type of sex discrimination in the simulated hiring and treatment practices of bank supervisors was recently reported (Rosen & Jerdee, 1974). Unless denial of access to women is entirely institutionalized, their actual chances of access depend mainly upon their own level of ability and the degree to which gatekeepers adhere to sex role stereotypes regarding women's work interest, continuity, and potential. Therefore, the relevant research findings fall in the category of informal occupational sex discrimination.

The available evidence indicates that, on the average, women are consistently offered lower salaries than men, regardless of their qualifications (Terborg & Ilgen, 1974). Because no data exist relating the magnitude of discrepancy between beginning salaries of men and women with the employer's (or personnel manager's) sex role ideology, we cannot determine the extent to which this type of discrimination is institutionalized as an explicit policy or depends upon the gatekeepers' prejudiced beliefs. Of course, this economic discrimination may often be due to indirect or disguised sex discrimination, due to women employees' older age, type of recommendations (not from important, influential persons), or graduation from less prestigious schools.

Once women have been hired, treatment sex discrimination tends to become more overt and clear-cut the more women perform well and aspire to top decisionmaking and policy positions (Miller et al., 1974). Women have often been openly bypassed for promotions that would place them in supervisory positions over men, despite the fact that they were the most qualified for these positions, simply because they were women (McCune, 1970; Kashket et al., 1974), and it has been well documented that there are few female full professors, deans, provosts, or presidents in academia (Safilios-Rothschild, 1974). Again, despite a considerable degree of overtness in the institutionalization of the denial of promotion to women, much of the discrimination is in fact indirect or disguised so that organizations can appear to be fair toward women.

Up to now we have been discussing what happens to women in masculine fields. In feminine fields, there is no occupational access sex discrimination, but the findings on treatment sex discrimination show that it varies with the percentage of men in the predominantly feminine field. Thus, a study of librarians showed that according to the percentage of men in the different subspecialties, women could be promoted to high positions. Only in subspecialties such as school librarianship, in which only 6 percent are men, could women get promoted to top leadership positions and have power. In subspecialties such as academic librarianship, in which one-third are men, this minority of men controls all the top positions of power in the field (Kronus & Grimm, 1971). Similar trends have been reported for social work and teaching, in which the minority of men has the leadership and the power (Lyon & Saario, 1973).

Indirect Institutional Sex Discrimination

Under this category is included discrimination based on women's education, type of professional acquaintance and support network, part-time employment status, publication record, work-related experience, and skills, factors indirectly influenced by their gender and the appropriate sex roles. With regard to access sex discrimination, women are often discriminated against because they have not graduated from the top schools, which (as we have seen) are the ones that discriminate most against women. Or they are discriminated against because they are not usually the proteges of influential male professors who, through the informal communication network, secure the best jobs for their favored students (Epstein, 1970). Or they are discriminated against because they did not get the opportunity in graduate school to do research with a creative professor that would lead to significant research interests and experience as well as publications (Solmon, 1973, 1974). Like blacks, women experience considerable educational discrimination at the college level, the results of which can be used to discriminate against them within the occupational setting without reference to their minority status. Educational discrimination has placed them in a disadvantaged position that can be claimed to warrant differential treatment in the occupational context.

Also, because women are discriminated against within the family and burdened with all household and childcare responsibilities, they often can work only part time or must take time off (especially when the children are small) and sacrifice time that could be used to write articles and books or apply for research money. Thus, their subordinate position in the family puts them in a disadvantaged position in the world of work, since employers can use their lower productivity or part-time status as a legitimate reason for lower salary and indefinite delay in promotion. Furthermore, women's geographic mobility has been drastically restricted because they had to stay where their husband's job was located. Thus women could not accept better job offers in other locations, nor could they use such offers in order to improve their status (Dinerman, 1971). A study of women microbiologists showed that little has changed recently (Kashket et al., 1974): 93 percent of the women doctorates answered that they would be willing to move only if their husband could find a satisfactory position in the same location before moving, but only 20 percent of the men made such conditions for their wives' employment.

A snowball effect seems to be operating with regard to treatment sex discrimination. Because women are hired at lower salary levels than men, and because they are given less chance to gain experience in challenging, responsible assignments (Terborg & Ilgen, 1974; Kay, 1972) and to participate in management training (Rosen & Jerdee, 1974), they often do not have the chance to develop the qualifications and skills required for promotion to top management positions. In the professions, because women are not invited to present papers (Yokopenic et al., 1974), to write chapters in influential books, to become visiting lecturers, to serve on review and editorial boards (Kashket et al., 1974), or to belong to powerful male cliques that make decisions about the distribution of "goodies" (Epstein, 1970; Dinerman, 1971), they do not have the same chances as men to become visible, well known, and prestigious. Hence, they can then be "objectively" discriminated against in terms of raises, promotions, and other occupational rewards.

In general, when women are not altogether excluded from occupations on the basis of institutional policies, other types of informal and institutional sex discrimination seem to come into play. In general, the more there is of one type of discrimination, the more there is of the other, since the consequences of one type of sex discrimination serve as the basis and the legitimation for the other.

Disguised Institutional Sex Discrimination

A very basic type of disguised occupational sex discrimination is the sex segregation of occupations into masculine and feminine and the sex segregation of subspecialties within each occupation. The existing sex segregation of occupations constitutes sex discrimination because occupations labeled "feminine" are low-status, low-pay, auxiliary occupations; the same holds true for subspecialties labeled feminine, even within masculine, prestigious occupations (Epstein, 1970; Safilios-Rothschild, 1974). The "feminine" label is rationalized in terms of the nurturant nature of these occupations--compatible with women's "nature" and their alleged flexibility in that they can easily go in and out of these jobs without much penalty (Coser & Rokoff, 1971). Because vocational counselors, teachers, professors, parents, and employers steer women toward these low-pay and low-prestige "feminine" occupations or subspecialties, women are discriminated against by becoming cut off from the more prestigious and financially rewarding fields. Furthermore, even when trained similarly to men, women are often hired or relegated to more routine, supportive, auxiliary positions in which they can help men achieve (Lipman-Blumen, 1973). This happens more often in the case of nonspecialized training (e.g., a bachelor's degree in liberal arts or English), but it has been reported even in the case of women lawyers (Epstein, 1974). In addition, in many occupational settings separate work classifications are used for men and women in designating essentially the same type of work; these classifications allow employers to discriminate against women in terms of salary and advancement possibilities (Landau & Dunahoo, 1971). Two well-known cases are the distinction between cleaning women and janitors and between stewardesses and bursars.

One study of graduate and undergraduate students in management showed that when asked about the most important qualifications of men and women applicants for a white-collar job, their sex role stereotypes conditioned them to perceive the woman as an applicant for a clerical job and the man as an applicant for an administrative management position. And this occurred despite the fact that the question posed to them indicated the same qualifications and job aspirations for the man and the woman (Cecil et al., 1973). Thus, the institutionalized departmentalization of jobs and positions may lead personnel managers and employers to discriminate against women regardless of their sex role ideology, because some positions are traditionally held by women and others by men.

Other types of disguised sex discrimination may occur on the basis of the universalistic criteria of age, parental status, pregnancy, physical weakness, and inability to lift weight, all of which have been used in discriminating against women. Whenever occupations have age ceilings for entry or practice, women are hit much harder since, as we have seen, they often enter occupations later than men or want to return to them after having had to discontinue working to take care of young children.

Parental status (namely, having pre-school children) in combination with sex status (being a woman) has also been used to discharge women from jobs. The courts did not consider this type of practice as constituting sex discrimination (Landau & Dunahoo, 1971). The same held true for the use of pregnancy to discharge or to not hire pregnant women in a variety of jobs, from research assistants to salesladies to secretaries. The argument was made that it was the pregnant status and not gender that necessitated these decisions! (Landau & Dunahoo, 1971). In recent years, however, courts have reversed their position in these issues, and it has been established as sex discrimination in the legal sense.

Another type of disguised sex discrimination is the one based on women's limitations in physical endurance and inability to lift heavy weight; it has excluded women from a number of jobs and occupations, regardless of their individual ability to perform the tasks involved in these jobs (McKelvey, 1971). Work arbitrators have upheld such occupational restrictions as valid, although in recent years some arbitrators and court decisions have judged them as sex discriminatory, concluding that decisions concerning the appropriateness of jobs should be made on an individual basis (McKelvey, 1971).

Finally, jobs that require extensive travel, geographic relocations, long hours, some degree of danger, and/or occasional abusive language have been restricted to men, because women as a class were considered unable to handle them due to their familial responsibilities as well as their "helpless," dependent nature (McKelvey, 1971). Thus, traveling salespersons' jobs and some newspaper jobs, such as night reporters, photographers, or crime reporters, have been unavailable to women (Lublin, 1972).

Informal Occupational Sex Discrimination

The degree to which employment gatekeepers adhere to sex role stereotypes is of crucial importance in determining whether and at what level women can enter male-dominated occupations as well as what their chances are for promotion and advancement. Several studies have shown that employers, managers, or management students hold stereotypic views of women (Bass et al., 1971; Rosen & Jerdee, 1974; Gilmer, 1961; Hagen & Kahn, 1974; Terborg & Ilgen, 1974; Schein, 1973; Bryce, 1970). One study of 174 male managers working full time and taking courses in the Graduate School of Management showed that most of them had negative stereotypes regarding women and their relationship to work (Bass et al., 1971). They felt that rules of etiquette and politeness define the interaction between the sexes in public—this deference possibly interfering in work interactions. They did not feel that women make good supervisors because men and women would feel uncomfortable with a woman supervisor, and they felt that women were not as dependable as men due to their biological and personal characteristics. It is important to note that managers who had had women as subordinates or peers tended to have the most negative stereotypes about women workers, in the former case possibly because of the low work commitment of women (and men) in low-status jobs and in the latter case, probably because women peers threatened them (Bass et al., 1971).

A study of bank supervisors showed that:

- They have less confidence in the ability of a female supervisor than a male supervisor to appraise the seriousness of a performance problem.
- They relied much more on sex role stereotypes in the case of ambiguous administrative decisions lacking clear-cut and established procedural rules, such as when male employees behaved in a nonstereotyped manner by asking leave to take care of small children or by asking for leave without pay (Rosen & Jerdee, 1974).

Similarly, Gilmer (1961) found that 65 percent of male managers believed that women would be inferior to men in supervisory jobs, are more neurotic, have a higher absenteeism rate, and have more work-related problems than men. In general, the available studies regarding gatekeepers' sex role stereotypes indicate, as Terborg and Ilgen (1974) have concluded, that according to the beliefs held, men are more independent, objective, and competitive, and therefore better suited for managerial and top scientific positions, while women, being passive, dependent, emotional, and nurturant, are less well suited for responsible positions in business.

Given these stereotypic views of working women on the part of managers, supervisors, and employers, women are not promoted even when they perform well because:

- The criteria for what constitutes a successful performance are not always clear cut and precise. Within this context of vagueness and ambiguity, sex role stereotypes can distort the supervisors' perception of women's level of performance and belittle it in comparison to men's performance (Terborg & Ilgen, 1974).
- Even when supervisors perceive that women's performance is very good, due to stereotypic beliefs, it is attributed to luck (Terborg & Ilgen, 1974). The repetition of successful performance over a considerable time period may convince supervisors that it is due to ability (Kelley, 1967).
- Supervisors and employers, due to stereotypic beliefs about working women, tend to have lower expectations of women. They do not identify them as competent and superior to others and worthy of being guided and helped to develop their abilities and advance. Thus, women are not assigned challenging and demanding duties that give them more experience and more self-confidence so that they can handle difficult tasks. They may expect less of themselves, eventually even resulting in a lower performance level (Torberg & Ilgen, 1974; Epstein, 1973).

It has been found that within the occupational setting, men are faced with impersonal rules and regulations, while women are more often required to adjust to rules that are particular to their relationship with a male boss. Similarly, organizational rewards offered women are often in accord with sex role stereotypes (such as little presents or being taken out for lunch) rather than more substantial and impersonal rewards (Acker & Van Houten, 1974). Both aspects of sex-differentiated treatment are discriminatory because they imply that women are not treated objectively in terms of their performance and are not objectively and commensurately rewarded. Instead, their evaluation and rewards are determined on the basis of idiosyncratic and unstable criteria which fluctuate unpredictably and require a commitment beyond the formal and impersonal work commitment. This fact tends to intensify the vagueness and ambiguity inherent in the criteria for judging the quality of work performance and to stress sex-differentiated criteria in judging men and women.

Because women are caught in such personalized work relationships, the approval, friendship, and support of supervisors become more important to them than to men. Thus, approval in the work setting is important to women because of both structural factors and their socialization experiences which have conditioned them to need the approval of significant others. That is why the "cold war" techniques used by men when women are successful and ambitious are often effective. One study reports, for example, that while a competent woman will be granted the appropriate status, she will no longer be liked and will be more likely to lose her job than an equally competent man. Men, and to a lesser extent women, punish high-performing women with rejection. The study, furthermore, showed that men did not like women in competitive contexts, regardless of their level of competence, although a high degree of competence aggravated their dislike. Since men almost always make decisions about promotions, tenure, or who must be let go in case of retrenchments, and since "disliking" is an important and relevant factor in these decisions, women are often informally but substantially discriminated against (Hagen & Kahn, 1974).

Similar findings were reported by another study, which indicates that the more women improve their position in an organization (in terms of rank, expertise, or authority), the more they tend to lose the friendship and respect of their colleagues as well as influence and access to information (Miller et al., 1974). Thus, it seems that high-status women are targets of greater informal discrimination, a fact that may tend to dampen the ambition and the willingness of women to work hard, since the result has both pleasant and unpleasant elements (Miller et al., 1974; Hagen & Kahn, 1974). The "cold war" may be relatively effective even in the case of women who have a more contemporary sex role ideology and do not place undue value on being liked. It seems that women who manage to reach high-status positions are long-distance runners who must endure loneliness and rejection from adolescence throughout their lives.

Another type of informal discrimination directed toward women is linked to their degree of physical attractiveness, since women have been viewed, as Prather (1971) points out, either as "servants" or as "sex objects." Because there is a stereotype that in the case of women "beauty and brains do not mix," beautiful women who achieve occupationally are not taken seriously. It is assumed that they "slept their way through" with key men (Prather, 1971; Smith, 1972). On the other hand, unattractive women are assumed to have entered masculine fields or to be highly achieving because they are compensating for their inadequate affective and sexual life (Prather, 1971; Smith, 1972; Campbell, 1968). Hence, attractive women are more discriminated against, especially when they are high achievers competing with men. They may not be hired, or they may not be chosen as assistants and proteges by supervisors and managers. Hence, they may be bypassed for later promotions because males do not want to have their behavior and motives questioned by colleagues and wives (Tobias, 1971). Or their exclusion from some jobs may be due to the fact that men wish to avoid the doubly disruptive effect that an attractive woman can have in an all-male work context. Furthermore, attractive and successful women are more of a threat to men than unattractive, successful women, probably because men are afraid that the former could subordinate them both affectively and occupationally.

But women workers are also discriminated against because of their image as "servants," which implies the myth that women will work for very little money or gratis as volunteers (especially when they like the employer or the work) and that they are best suited for nurturant occupations through which they can help other people. This myth follows women even after they have reached top positions, where they may still encounter expectations to fulfill these types of roles (Prather, 1971). For example, women professionals, much more often than men in similar positions, are expected to volunteer their time and services at no pay for a variety of worthy causes.

Another type of informal sex discrimination that takes place within the occupational context is the fact that even when women are promoted to supervisory positions, they are usually not granted sufficient autonomy and remain "under the thumb" of their male supervisors. Their lack of autonomy and decisionmaking is sizable (in itself and relative to that held by men in same-level positions) and they are aware that their power is limited (Chernik and Phelan, 1974; Athanassiades, 1974). Their subordinates are also aware of their limited power and do not view them as their real supervisors (Hansen, 1974). Thus, it seems that even when women are promoted, they are never entrusted with the same autonomy and power as men. In this way, their image and position are undermined, since it is clear that they do not really count.

Yet another type of informal sex discrimination, little researched and discussed, refers to women's attractiveness, a characteristic which has been largely irrelevant when men are hired or promoted. In the case of women, however, their attractiveness enhanced, if not determined, their chances to be hired, especially in auxiliary and/or "decorative" occupations such as secretaries, receptionists, salesladies, waitresses, stewardesses, or assistants. In this way, working women in these jobs were fulfilling not only a serving role but also a "sex object" role (Safilios-Rothschild, 1978).

Having examined the different types of occupational sex discrimination and having concluded that the extent and consequences of this discrimination are considerable, the important question is: To what extent are working women aware of discrimination? The results from different studies vary, since they include different populations of women and do not control for male- or female-dominated occupations or for the type of sex role ideology held by these women. Basically, two important factors shape their experiences and their perceptions. One study of 163 Barnard College alumnae, half of whom were teachers, showed that over two-thirds of them were aware of sex discrimination. Half of all these women felt that they had experienced it personally. There were important variations, however. More women in professional occupations (other than teaching) were aware of sex discrimination than teachers; more women with high than with low salaries and more single than married women were aware of and were exposed to sex discrimination (Gould & Pagano, 1972). Thus, the evidence shows that women in masculine and high-paying positions are more aware of sex discrimination, partly because they experience more of it.

A study of women in managerial positions showed that they are also aware of sex discrimination, since they perceive that they have less authority, less decisionmaking power, less autonomy, and less freedom to disagree with their superiors. Their male and female subordinates were also in agreement that there is discrimination against women in business and government organizations (Athanassiades, 1974). A study of newspaper women showed that only half of them believed that they would be discriminated against in promotions, and over half of newspapermen agreed with them (Lublin, 1972). This lower degree of reported awareness is most probably due to the narrow specification of sex discrimination only in terms of promotion. A small percentage (15 percent) of academic women also reported that antinepotism had hurt their careers (Simon et al., 1966), but that does not imply that all academic women are not aware of the sex discrimination involved in antinepotism or in many other types of sex discrimination in academia.

Another study of a national probability sample of persons living in households, 16 years old or older and working for pay 20 hours a week or more, included 351 women and 695 men employed full time and on a regular basis (Levitin et al., 1971). This study examined the extent of objective and perceived discrimination and reported that while 95 percent of women were financially discriminated against (the discrimination being much more serious in the case of high-status and white-collar occupations), only 7.9 percent of them felt that they were discriminated against on their jobs. The authors explain this large discrepancy in terms of the fact that women use other women rather than men as a reference group, partly because they do not know what men are paid and partly because they may not have overcome their socialization into the inferior sex status and feel uneasy about comparing themselves with men (Levitin et al., 1971). Thus, it is more difficult for them to perceive the extent of sex discrimination.

8. THE CASE OF BLACK WOMEN: RACE AND SEX DISCRIMINATION

Two important issues often raised are whether the double-minority status of black women is an advantage or a disadvantage, and whether sex causes more discrimination than race. Some authors, such as Epstein (1973) and Bock (1969), note that the professional status of black women in traditionally "masculine" professions such as law and medicine is high, and that a higher percentage of black women than black men are in these professions. Other authors have shown, however, that neither the overall position of black women workers nor the income level of black female professionals is better than that of black men, white men, or white women (Almquist, 1974; Featherman, 1974; Scott, 1973).

Almquist (1974) notes that although more black women than black men are professionals and black women stay in school longer than black men, a large number of black female professionals are nurses and teachers. These occupations traditionally are reserved for females, and the wages are equivalent to those of some male blue-collar workers. Using U.S. census and labor data to compare black males and females in professions that are not traditionally female dominated and low paying, Almquist eliminated nurses, dieticians, therapists, and teachers below college level from the data on professional women. This reduced the number of black female professional workers from 11.3 percent to 3.99 percent. Eliminating these occupations from the black male professional group reduced professional workers only from 5.86 percent to 4.43 percent. Thus, except for nurses and teachers (whose professional status ranks about in the middle), there were actually more professional black males than black females. Furthermore, black males working full time as professionals earned, on the average, nearly $3,000 more annually, even though black females had, on average, more years of school (Almquist, 1974).

In other than professional occupations, Almquist showed that black women are much more disadvantaged than black men. Black women are more likely to be white-collar workers than black men only because so many black women are secretaries. Black men are more likely to be managers or administrators, and more are craftworkers and supervisors. Furthermore, craftworkers and even male operatives earn much more than female clerical workers. Black professional women as a group earn only $17 more per year than black male craftworkers (Almquist, 1974).

It seems, therefore, that females, regardless of race, are discriminated against. Havens (1972) found that, according to 1963 U.S. census data, the median salary for the most remunerative occupational category for all professional women corresponded with the median income of male laborers, who ranked seventh (least remunerative category) for men.

Examination of median earnings for all occupations reveals major discrepancies between males and females. Females are underrepresented in the highest paying jobs of each occupational category. In the professions, women are underrepresented among physicians, surgeons, dentists, lawyers, and architects and overrepresented in the lowest paid strata of social workers, elementary school teachers, librarians, nurses, and medical and dental technicians. Furthermore, women in three blue-collar categories had higher median earnings than women in the sales category. Median earnings in the 1960 census, ranked by categories, showed a major discrepancy between male and female earnings in sales; this category was ranked only seventh for females but fourth for males (Havens, 1972). As noted in chapter 7, the situation changed little during 1970's.

Given that black females are discriminated against on the basis of sex, it is important to note one surprising exception: better educated black women have an advantage over better educated white women. Using 1970 census data, Sorkin (1972) found that among women with 16 years or more of education, nonwhites (92 percent of whom were black) had a median income of $7,744, whereas white women with equivalent levels of education had a median income of only $5,995.

Sorkin also noted that in 1970 the average salary of nonwhite female elementary and secondary school teachers (the highest paying professional occupation employing large numbers of

88

women) was $7,311, whereas white female elementary and secondary school teachers had a median income of $5,902. Sorkin ascribed this difference not to the intermittent employment patterns of white women versus full-time employment patterns of black women (as noted by Moynihan), but to lower mobility rates of nonwhite college graduates, who are more likely to remain with one employer and therefore earn higher incomes because of seniority. Although black women are discriminated against on the basis of sex, the second minority status (race) of well-educated black women tends to diminish income differences. Thus, there is less economic discrimination against relatively well-educated nonwhite women than against poorly educated nonwhite women.

Nevertheless, black women are still the most severely disadvantaged group economically. This was clearly documented by Almquist (1973), who assessed the income loss of black women due to discrimination on the basis of both sex and race. Almquist subtracted the average actual income of all black women from the standardized income levels that black females would have earned if they had the same age, educational, occupational, and regional characteristics as white men. The difference between the standardized income and actual income was posited to result from discrimination. The measure was somewhat conservative since it did not take into account interactive effects among factors such as education, occupation, and previous discrimination processes and was based only on current wage discrimination.

In comparing the four occupational groups (black females, black males, white females, and white males) and in standardizing the black females' income as a percentage of the higher group's income, Almquist found that black females earned 77 percent of what white females earned, 64 percent of what black males earned, and only 39 percent of what white males earned. The actual income difference between white females and black females was $1,203, and the standardization for education and occupation explained the entire income difference (Almquist, 1973). This indicates that when education and occupation are controlled, race does not determine a woman's wages. The educational differences between the two groups, however, show that educational opportunities are affected by race discrimination and reflect differences in social class composition of the two racial groups.

When the black females' income was standardized to that of black males, the income difference due to sex discrimination was $2,501. The parallel income difference between white males and females was $4,470, a difference explained by sex discrimination. However, the income difference due to race discrimination between black males and white males was only $1,772. This strongly suggests that black women are disadvantaged mainly because of sex rather than race. It further suggests that sex discrimination is less prevalent among blacks than among whites. Indirectly, being black may be an asset to highly educated women, but black women who are not well educated do suffer more economically because of their double-minority status.

Of the four race/sex groups, black women made the greatest occupational gains between 1960 and 1970--from 42 percent of what white males earned in 1960 to nearly 50 percent in 1970. However, this was not due to less wage discrimination, but rather to occupational advances (Almquist, 1973). For example, among black women, there was a decline in the number of household workers and a simultaneous increase in the number of professional workers (from 7.5 percent to 11.3 percent) and a dramatic increase in the number of clerical workers (from 8.4 percent to 19.4 percent). These trends probably reflect the rising educational level of black women, as documented by Sorkin (1972). However, as of 1971, the unemployment rate among black females was very high (Almquist, 1973; Featherman, 1972; Sorkin, 1972). Sorkin (1971) noted that this may have been caused partially by the entrance of black women into occupations with less employment security. For example, workers in clerical and sales positions experience higher unemployment rates than those in domestic work. Furthermore, employers are using more janitorial and domestic service agencies, businesses that hire predominantly males (Featherman, 1972).

Barrett and Morgenstern (1974) also noted that blacks and young persons generally experience a cycle of frequent job changes and periods of unemployment when changing jobs. This may reflect a selective entry of uneducated, unskilled persons into dead-end jobs that provide neither fringe benefits nor training for future advancement. The result is structurally induced unemployment and a negative attitude toward work. On the job, racial as well as sexual harassment is probably experienced more frequently by black women and tends to reduce their work commitment (Bonney, 1974). Black teenage females may have high unemployment rates because employers prefer to hire whites first (Sorkin, 1971).

Black women of low socioeconomic status are more disadvantaged than whites of the same status because of their high fertility rates, high unemployment, and inadequate welfare benefits. Due to sociocultural differences, black women desire fewer children than white women, but they give birth to their first child earlier (Presser, 1971; Sorkin, 1971; Micossi, 1974). Furthermore, according to Presser, the earlier the first child is born, the more children the woman will eventually have. Once a young black woman experiences her first birth, the spacing of subsequent births will be shorter than for white women. In general, this high fertility rate curtails educational options, subsequent training opportunities, and work advancement. Adolescent black mothers are less likely to complete high school and hold a steady job. Also, the nature of the work available to uneducated, lower class young mothers contributes little to their motivation to avoid further pregnancies. The probability is high, therefore, that they will continue having children, although having a second, third, or fourth child does not have as dramatic an effect on participation in educational or work roles as having the first child. Only black women in professional, technical, and kindred occupations limit the number of children they have, and they do so to a greater extent than white women of the same occupational status (Presser, 1971).

Black women are also more likely than white women to be single parents. This decreases their marriage options and increases the likelihood that they will depend on welfare (Presser, 1971; Scott, 1974). Policies toward black women on welfare are paternalistic. Agency workers assume that fathers normally head a household, and unmarried women with small children are treated as deviants to that norm. They are rarely given job training, and of those who do get training, few are given jobs that are not dead end, monotonous, and without benefits. Welfare neither provides good childcare services nor supports higher education, but channels the recipients into poorly paying jobs when the children go to school and encourages them to seek marriage as a "solution" to their problems (Iglitzin, 1974).

Black women, particularly those who are uneducated or poorly educated, are more aware of sex discrimination than white women; 67 percent of them (twice as many as white women) are sympathetic to the Woman's Liberation Movement (The 1972 Virginia Slims American Women's Poll, 1972). However, there is evidence that working black women are more accepted by black men than white women are by white men, and black men give more positive evaluations of black women than white males give of white females (Ross & Walters, 1973; Turner & Turner, 1974a). Also, there is evidence that black mothers have higher educational and occupational aspirations for their daughters than for their sons (Brook et al., 1974; Buck & Austrin, 1971; Weston & Mednick, 1970). Black adolescent girls, aware of these high parental aspirations (Kim, 1969; Brook et al., 1974), have higher self-esteem and self-confidence than adolescent white girls (Simmons & Rosenberg, 1975) and have been less often afraid of success (Weston & Mednick, 1970).

It seems, therefore, that a black woman's socioeconomic status determines whether being a black and a woman translates into a double-minority status. Work has been an absolute necessity for the survival of women of low socioeconomic status as well as for their children. This as well as the obligation to be strong, reliable, and competent may have boosted their self-confidence and self-esteem, but it has not freed them from a position subordinate to that of black men within the family and in interpersonal relationships. It can be claimed that black women of low social status have represented a triple-minority group.

Middle-class black women have been better able to avoid negative, discriminatory effects, especially when they felt psychologically free to make "masculine" occupational choices. As long as they remained "women" and accepted male dominance regardless of educational and occupational achievements, they had the support of black men.

In summary, all of the above data need careful reexamination in the light of current and ongoing changes in black men's ability to achieve highly in the educational and occupational domains.

Part IV.

Sex Discrimination: Theory and Research

9. SEX DISCRIMINATION: THEORY AND RESEARCH[1]

Sex is the basis of discrimination in all societies. Everywhere, sex stratification systems make for an unequal distribution of wealth, power, and prestige on the basis of gender. Since women usually occupy the inferior position, they are the ones who receive a lesser (or no) share of the valued societal goods. Of course, men may also be discriminated against on the basis of their gender in some areas (such as child custody), but never with respect to the most valued goods: wealth, power, and prestige.

However, because several salient stratification systems coexist in most societies, every individual occupies a position in each one of them. These different stratification systems may include: social (class), racial, religious, ethnic, age, height, and health stratification. Most often the profile of each individual's statuses in all these stratification systems is uneven in that the individual may occupy the subordinate position in one or more systems, the superordinate position in another system, and a middle status in other systems. A woman, for example, may be black, middle class, young, and disabled. And another woman may be white, working class, Jewish, old, and healthy. Thus, the degree of discrimination directed against different women is, in fact, determined not only on the basis of gender but also on the basis of a number of interacting statuses they occupy on all salient stratification systems. Some of these statuses may compound the degree of discrimination directed against women, and others may neutralize their sex status and thus minimize sex discrimination.

While the extent to which any individual is discriminated against depends upon the unique combination of statuses s/he occupies on the different overlapping stratification systems, no theory systematically treats this problem, and little empirical-relevant evidence is available. Hraba and Braito (1974), in a pioneering article, have dealt with the overlapping race, sex, and class statuses and the individual's consciousness of relative discrimination on the basis of each of these characteristics. They claim that individuals tend to attribute experienced social inequality to the one criterion that explains their status incongruency or status inconsistency (Hraba & Braito, 1974). Working-class women, for example, who become educated but whose education does not translate into economic, prestige, or power gains as it does for men in the same economic class, will tend to (accurately) attribute experienced inequality to their gender rather than to their class position (Blum & Coleman, 1970; Harbeson, 1971; Epstein, 1973a). Evidence from a recent study of adolescents supports Hraba and Braito's (1974) contention. This study showed that the earliest self-placement into social identities was made in terms of gender rather than on the basis of race or class position. Gender was the second most salient social identity following age for both black and white ninth grade students, while race was ranked 7th by black students and 10th by white students, and identity had the lowest saliency of all social identities (Wellman, 1971).

Probably the best studied overlapping stratification systems and the varying degree of ensuing discrimination are the race and sex stratification systems and, to some extent, the class stratification system. All available evidence indicates that, at least within the American society, occupying the double superordinate position of a white male gives the individual extraordinary advantages of opportunity and access to valued societal goods, regardless of his merits (Safilios-Rothschild, 1974a).

In one study, several transcripts reflecting different levels of performance, ability, and grades were sent to universities and colleges all over the United States to be evaluated and considered for admission. Accompanying each transcript were names and pictures identifying it as belonging to a male or female, white or black, with the identifying characteristics varied to represent each race-sex group at each level of scholastic ability and achievement. The results showed that among males, white applicants were clearly chosen regardless of ability. Furthermore, low-ability and low-achievement white males were chosen over white or black females of equal or even higher ability, unless the women were quite obviously superior (Walster et al., 1971). Thus, among men, the superordinate position in the race stratification system is the determining factor in the access to valued goods. For women, their subordinate position in the sex stratification system seems to be so pervasive that they are consistently discriminated against regardless of race, unless they have such an outstanding scholastic achievement that gatekeepers are willing to let them in the circle of the "chosen few."

---

[1] This chapter was previously published in slightly different form, in Case Studies on Human Rights and Fundamental Freedoms: A World Study, published for the Foundation for the Study of Plural Studies by Martinus Nijhoff, The Hague, 1977.

There is also considerable evidence from developing societies that women with high social status experience little sex discrimination due to their status (Safilios-Rothschild, 1974a). Their superordinate position in the class stratification system exempts them from the restrictions and constraints of sex role stereotypes and ensures them, almost equally with men, access to and control of the valued goods of wealth, prestige, and power. High social status can neutralize the inferior sex status only in societies in which the prevailing class stratification system tends to be rigid. There is little upward social mobility in these societies, and the prevailing criteria are particularistic and even familistic. High-status men favor high-status women over the lower status men, thus safe guarding that wealth, prestige, and power will remain within the class confines.

Black women seem to have attracted considerable attention and research interest partly because they represent a clear-cut case of a "double-minority status" and because research evidence shows that in some circumstances their low status in both the race and sex stratification systems becomes an advantage (Epstein, 1973b; Bock, 1969). Epstein (1973b) found that black professional women who entered prestigious occupations stereotyped as "masculine" within the American society (such as law, medicine, or engineering) managed to obtain higher income and status than black professional men or white professional women. Her explanation was that these black women were nonthreatening to white men and were allowed access to prestigious "masculine" fields and even a considerable degree of occupational achievement. These black women were nonthreatening to white men because their double-minority status placed them outside the realm of institutionalized rules of exchange since they could not exchange sexual attractiveness for the right to enjoy desired goods. Their sexual possession by white men in no concrete way enhanced their status since high-status white men could have sexual access to black women, if they wished, without having to offer income and status through marriage in return. Until recently, the black woman was supposed to be psychologically and socially rewarded by the mere fact that a white man was interested in a sexual association with her.

Actually, it is important to note that black professional women earn more on the average than white professional women (Sorkin, 1972). This is partly because black women seem to have been less restrained from entering high-paying "masculine" occupations and partly because black women have lower geographical mobility and hence greater seniority (Sorkin, 1972). Almquist (1973), however, found that after standardizing for education and occupation, no race discrimination in terms of wages is evident between white and black women. However, when the black female's income is standardized to that of the black male, the income difference due to sex discrimination is high (namely, $2,501). Furthermore, white females, standardized in terms of education and occupation to white males, earn on the average $4,470 less than white males, while the income difference (due to race discrimination) between black and white males is only $1,772 (Almquist, 1973). It seems that being black may be indirectly an asset to highly educated women over similarly educated white women. Black women who are not well educated may suffer an economic double penalty from their double-minority status. In general, sex discrimination appears to exceed race discrimination since, after controlling for education and occupation (access to which is greatly inhibited by sex and race discrimination), income discrepancies are larger between black men and women than between black and white women or between black and white men.

Despite the many different overlapping stratification systems and the fact that the degree of discrimination that any woman experiences is determined by the particular configuration of statuses she occupies in these stratification systems, many of the theories and research studies have abstracted sex discrimination and dealt with it exclusively. Possibly a definition of sex discrimination is necessary at this point. Sex discrimination refers to the differential treatment of women and men on the basis of their categorical membership, that is, on the basis of their gender, without consideration of individual differences in terms of ability, competence, inclination, and commitment.

The sex stratification system is maintained, and women are assigned and kept at the subordinate position by means of sex role socialization as well as by sex discrimination. Sex role socialization refers to the cognitive and learning processes by which women (and men) internalize the sex role ideology, that is, a complex body of stereotyped beliefs about the "nature" (inferior and weak) of women and the sex-appropriate means for sharing in the distribution of valued goods (that is, income, status, and power).

Successful sex role socialization guarantees the bringing up of sexist individuals who will discriminate on the basis of gender; uphold sexist, prejudiced values; and maintain the sex stratification system. The existence of a sex stratification system is legitimized by respected and influential ideologies—religious, moral, or scientific—or by some combination of such ideologies. Depending upon the type of society and the prevailing degree of social differentiation and complexity, the type of legitimizing ideology varies. The more "closed" a society in terms of social mobility and the less socially differentiated and complex, the more the legitimation of women's subordinate position is derived from practically immutable religious and/or moral ideologies. The more a society is "open," socially differentiated, and complex, the more the legitimation is predominantly derived from scientific ideology, which can be potentially attacked for its correctness on more "objective," scientific (and hence subject to proof and change) grounds.

Sex Prejudice

Turning now to examine the nature of sex prejudice (or sexism) and its behavioral correlates, the existing literature deals mainly with race prejudice and only infers the extent to which existing theories and research findings are equally applicable to sexism. The belief theory of prejudice suggests that when an individual is perceived as black or a woman, the tendency is to make assumptions about his/her different beliefs, assumptions which account for our negative feelings and discriminatory actions toward that individual. The assumption that another individual will not validate one's belief systems tends to dispose one negatively toward that person (Banks, 1974). Furthermore, it seems that prejudice, racism, or sexism is the outcome of a combination of the tendency by those who are already prejudiced to perceive blacks or women as dissimilar to themselves and of the tendency for this perception of dissimilarity to trigger an even greater degree of prejudice.

In fact, the belief theory can explain some aspects of sexism that are expressed by means of overt, blatant sex discrimination. In societies and in periods in which the type of dress, the overall appearance, the language and the existing norms about behavior established and accentuated differences between men and women, we find the most blatant sexism and sex discrimination directed against women. The veils worn by women in Muslim countries provide a striking example of the creation of and the accent placed upon a visible difference between men and women. Since differences could, at least theoretically, result in sex discrimination in either direction, it is the content of the accentuated differences that helps to underline women's subordinate, dependent position. The crinolines, the corsets, the long narrow skirts, the dainty shoes, the long hair all helped underline not only the existence of two separate worlds—the "man's world" and the "woman's world"—but also the weak, helpless, and dependent "nature" of women.

It must be pointed out, however, that the present trend in the United States and most Western European countries toward unisex clothes, hair styles, and appearance, especially among the young, is a helpful and necessary but not sufficient condition to break down sexism and sex discrimination. Probably overt, blatant sex discrimination is affected by this unisex tendency, which plays down the anatomical and physical differences between men and women. And it is again this openly proclaimed type of sex discrimination—the overt, blatant type—that is first and most affected by non-discrimination legislation, policies, and ideologies. But unless psychological sexism is eradicated, sex discrimination goes underground and becomes more disguised and subtle, but no less invidious. And because of its subtlety, it is more deadly and more persistent.

Other studies have shown that highly prejudiced individuals tend to make grosser discriminations under stress (than in more neutral situations), to include the subject of their prejudice in the same category with an innocent bystander, and to project their hostility onto the latter. Less prejudiced people react to stress with a tendency to make finer differentiations (Berkowitz, 1961). These findings from race prejudice become very relevant since they agree with observations that under the present stressful conditions of unemployment, inflation, and severe budget cuts, men and women who are highly sexist tend to make more gross sexist evaluations, judgments, and decisions than before, especially if they are personally involved in potentially threatening situations in terms of income, employment, promotion, tenure, or access to power.

The important issues are: To what extent is sexism translated into sex discrimination? What is the type of sex discrimination? What are the conditions that tend to enhance or depress the acted-out degree of sex discrimination? Available studies on the relationship between race prejudice and race discrimination have shown that reported attitudes and actual behavior are not consistent (Merton, 1949; Rose, 1956; Simpson & Yinger, 1958; Westie, 1964). Highly prejudiced individuals tend to be more inconsistent because they are affected by a number of conditions and social constraints, such as prevailing values regarding the nature, rights, and treatment of blacks or women and the type of relationship and interaction with the person in question (Linn, 1965; DeFriese & Ford, 1968; Warner & Dennis, 1971). Nonprejudiced individuals are quite concerned about and influenced by how they think others will interpret, evaluate, and react to their behavior vis-a-vis blacks or women (Linn, 1965; Fendrich, 1967; Warner & Dennis, 1971). This explains why, once the Women's Liberation Movement ideology became widespread in the United States, Scandinavia, and some other Western European nations, some men—who were never sexist—felt free to treat women as equals and as individuals and to discontinue discriminatory behaviors they adhered to in the past because of perceived social constraints (Safilios-Rothschild, 1974a).

The present, persisting poor agreement between sexism and sex-discriminatory behavior may be attributed to the following principal reasons.

(1) Prejudiced people may appear to be free of sexism according to standard attitude measures, especially if they are well educated and can, therefore, effectively dissimulate socially "undesirable" attitudes, such as sexist attitudes. As sexism increasingly becomes something that "nice" people should not feel, subtle measures are needed to tap the dimensions involved. Apparent inconsistencies between attitudes and behavior may be only measurement artifacts and may in fact represent a good fit between sexism and sex-discriminatory behavior.

(2) In many educational and occupational settings in the United States and a few European societies, there are psychological, social, and occasionally economic sanctions imposed for demonstrated sex discrimination. Therefore, even highly prejudiced individuals—especially those in prominent, decisionmaking positions—often have to mask their prejudice and to refrain from overt sex discrimination or are required to take action against ongoing overt sex discrimination. This situation creates cognitive dissonance in them, since they remain as prejudiced as ever, but at least some of them cope with the resulting stress by reexamining their beliefs about women and by lessening the degree to which they are sexist (Safilios-Rothschild, 1974a).

(3) Some individuals who are not sexist may discriminate against women in one context but not in another. Because sex prejudice is not unidimensional, some men may be free of prejudice with respect to women's educational and occupational rights and options but may be unwilling to treat women as equals in the familial, sexual, and affective contexts (Safilios-Rothschild, 1972a).

It must be emphasized that it is very difficult to draw conclusions regarding the degree of agreement between sexist attitudes and beliefs and sex-discriminatory behavior partly because it is increasingly difficult to accurately measure sexist attitudes and partly because research hitherto has seldom tapped varieties of sexist behavior beyond the overt, blatant type of sex discrimination. Inconsistencies are, therefore, probably due to measurement shortcomings rather than to actual, meaningful discrepancies.

A Typology of Sex Discrimination

Sex discrimination may be expressed and acted out differently according to the type of society, the prevailing values about equality and freedom, the social desirability of sex discrimination, the degree of sex prejudice, the acting individual, the value attached to the "goods" at stake, as well as the characteristics of the woman toward whom the sex discrimination is directed. While we shall consider the effect of each of these factors on the type and intensity of sex discrimination, it is helpful to start with a concise typology of sex discrimination. This includes two major categories: formal and informal sex discrimination. The first category is divided into indirect and institutional sex discrimination (comprised of overt and disguised sex discrimination).

Formal Sex Discrimination

This term refers to sexist behaviors that have been formalized as policies, laws, rules, or precedents and are followed as "due process." Formal sex discrimination may vary according to the degree of directness and the degree of overtness of the discriminatory actions.

Indirect sex discrimination.—This term refers to sex discrimination that can take place at one level or setting on "objective" grounds because overt and informal sex discrimination was successfully carried out at previous levels or in other contexts. For example, considerable sex discrimination at the university level is indirect because overt and informal sex discrimination at the elementary and high school level as well as within the family has already eliminated many options; shaped aspirations, likes, and dislikes; stifled talents and potentials; and instilled sex-appropriate fears and controls.

Institutional sex discrimination.—This term refers to sex-discriminatory behavior that has been built into the formal policies of institutions. This type of structural, institutionalized sex discrimination tends to be perpetuated by prejudiced and nonprejudiced persons alike (Burkey, 1971; Blauner, 1972; Berkanovic, 1973; Butsch, 1974; Benokraitis & Feagin, 1974). Isolated, nonprejudiced individuals in powerless positions cannot go effectively against institutional sex discrimination, even if their consciousness is raised significantly to recognize sex-discriminatory practices. Many nonprejudiced individuals are not conscious of the sex-discriminatory nature of many policies they follow and practices in which they engage. When, however, many individuals within an institution are nonprejudiced and become conscious of sex-discriminatory institutional processes, they can change these processes, especially if at least some of them have power and societal and/or legal support. It can be argued that some structural aspects of institutions which are directly and indirectly overtly sex discriminatory are to a large extent beyond the control of individual institutional members, regardless of their degree of sex prejudice. Taking the educational institution as an example, structural features such as sex-differentiated curriculums and fields (determined by centralized higher authorities and prevailing values), sex ratio of teachers or professors and school or college administrators, and sex-segregated schools and colleges represent discriminatory features against which considerable legal and popular polemics must be aroused before they can be attacked and changed. Institutional members, such as teachers, school administrators, and vocational counselors, can partially counteract the sex differentiation of curriculums and fields if they do not themselves endorse the appropriateness of such sex differentiation.

Institutional sex discrimination may be overt, if the institutional processes and policies openly discriminate on the basis of gender, or disguised, if sex discrimination takes place under the guise of another, more universal and socially acceptable criterion, such as age limit for college admissions, undesirability of credit transfers, or exclusion of part-time students from graduate and professional schools (which discriminate almost entirely against women college students). In some cases, the disguise used for sex discrimination is ridiculous, as when university policies excluded pregnant students from research assistantships (and other financial aid to graduate students) on the basis of their "pregnancy rather than on the basis of gender"!

Informal Sex Discrimination

This term refers to sex-discriminatory practices and behaviors of prejudiced individuals that may vary considerably with respect to the degree of overtness or subtlety. Since informal sex discrimination is carried out by prejudiced individuals, it may take place regardless of the degree of institutional sex discrimination present. In its subtlest forms, informal sex discrimination can be successfully practiced even when the formal policies and rules of an institution not only are nondiscriminatory but clearly forbid and even punish sex discrimination.

While all types of sex discrimination are usually found in all societies, different types of discrimination are more relied upon in different societies. One of the important societal differences is the explicitness and thoroughness of the prevailing sex role socialization process. The more closed a society and the less equality is valued and legitimized by influential political and social ideologies, the more sexism can be overt. Then the socialization of children can explicitly and systematically prepare them to fit in a rigid sex stratification system. Little girls are made to feel less important and valuable than their brothers in all circumstances. Parents are proud of their sons and brag about them to friends and relatives. Even when they have to punish them harder and more frequently, it is clear that they have an admiration and a weekness for them and for their rough, unruly, "masculine" behavior. Boys are given the best morsels of food and, in cases of food scarcity, they are given most of the food while girls suffer from malnutrition. Girls observe the subservient position of their mothers, who take orders from their fathers, are shouted at when they have disobeyed these orders, and are treated as servants and objects. Girls also witness the family drama when another girl is born instead of an expected and hoped-for boy. Everybody is unhappy, tears are shed, and not infrequently the father is angry and turns his anger against his wife who "can only bear girls." Furthermore, the message that the subordinate position is the girls' rightful place in the sex stratification system gets across to them by the fact that brothers (even those younger than their sisters) become the protectors, controllers, and overseers of their sisters, and have the right to beat them up, to embarrass them, to shout at them, and to run their lives. With such clear-cut, explicit, and poignant sex role socialization experiences, girls have to be born rebels to attempt or be able to escape their "natural" subordinate position in the sex stratification system.

In closed societies with relatively little upward social mobility, people do not have aspirations and expectations to change their lives significantly from that of their parents and therefore tend to accept their assigned place. In such societies, a particularistic rather than a universalistic orientation accentuates women's inability to escape traditional sex role stereotypes and sex-stereotyped options since decisions and evaluations are made on the basis of what one's sex is ("a woman") rather than on the basis of what one can do (individual abilities, talents, and competence).

In such societies, because sex role socialization is so explicit, pervasive, and thorough and because sex discrimination is also self-understood, clear cut, and overt, there is no need for elaborate and subtle sex discrimination. Thus, there is no need to rely upon disguised institutional or informal sex discrimination. Nor is there a need for systematic societal checks at different critical points in order to screen out women who may have slipped through. Because of this, the very few women who escape the sex role socialization can, if they are highly intelligent or of high status, beat sex discrimination by using their particularistic characteristics (high intelligence or social status) and manage to reach high positions and enjoy considerable power.

On the other hand, the more social mobility becomes possible or expected in a society, the more universalistic are the criteria (actually or ideally) used, the more equality becomes valued and legitimized by major ideologies, and the more sex role socialization and sex discrimination tend to become subtle and disguised under other more acceptable pretences. Girls are told that they are different from boys, but equally important. At the same time parents, teachers, and the media admire and emphasize masculine pursuits, masculine characteristics, masculine achievements, and male heroes. Girls are encouraged to do well in school, but the message is clear that if they are too intelligent and too highly achieving, boys will not be interested in taking them out and will not fall in love with them. Girls are brought up with the rhetoric that they are free to do whatever they wish but are carefully indoctrinated and steered to do the "right things," that is, to accept the constraints of feminine stereotypes in order to be loved and accepted.

Since this type of more subtle and psychological sex role socialization may not be consistently successful or always expertly carried out, and because sex discrimination cannot be blatant, a great wealth of techniques and means to discriminate proliferate as checks at different critical points of access. Thus, elaborate indirect means of sex discrimination, disguised sex discrimination, and informal sex discrimination techniques are used. The last are relied upon the most for controlling "deviants" from sex-stereotyped options and behaviors. Some informal sex discrimination techniques require actors who are aware of their sexism; in others, the sexism may be unconscious. The fact that often unknowingly sexist individuals successfully use informal techniques of sex discrimination was clearly demonstrated in the United States after the widespread dissemination of the "sex role ideology." When some teachers, professors, parents, vocational counselors, administrators, employers, or therapists realized how sex discriminatory many of their techniques, arguments, advice, or suggestions were, they became anxious to change them since they had not been aware of their sexist behavior.

The important feature of sex discrimination in open, universalistic-oriented societies is that sex discrimination in all its forms is pervasive in all societal structures and institutions at all levels. Even women who have managed to escape the limitations of an effective sex role socialization cannot get through the many sex-discriminatory checks built into all important access points. Furthermore, the more open and universalistic the society purports to be, the more women and men are given the impression that they are making free choices and that decisions concerning them are made on the basis of objective, universalistic criteria. As long as no particular social movement has made "gender" a suspect criterion, it continues to be used as a valid, substantive criterion for differentiating "appropriate" fields, positions, promotions, salaries, and other options for men and women.

Following the Women's Liberation Movement and ensuing sex role ideology, it becomes clear that gender is a suspect criterion on which to base valid decisions. Sex discrimination becomes illegal, but it does not disappear; it only goes underground. New subtler, more sophisticated strategies and techniques are devised in order to disguise or enforce sex discrimination while officially complying with nondiscriminatory rules and policies. The most well-known technique is tokenism, by which the complying institution admits only one (or two) female students or hires one (or two) female employees, professors, or administrators in an all-male field. It is only recently, however, that research has shown the dynamics by which such tokenism truly constitutes sex discrimination.

For example, research on the type of role models that token faculty women provide for female students has shown that such faculty women tend to accentuate the marginality and inappropriateness of women in the professional field involved. Women, therefore, are discriminated against in that they do not feel encouraged to opt for masculine fields, and the available research findings show that in fact they choose fields much less often in universities and departments in which there is an insufficient number of women faculty models to normalize their professional choice. Furthermore, token women faculty members may occasionally serve as negative models because of their own peculiar idiosyncracies or lifestyles, which again tend to stand out instead of being normalized within a larger group of faculty women (Litton-Fox, 1973). Token women faculty members have in the past acted (and are still occasionally acting) as negative models through the "queen bee" syndrome, that is, by actively discouraging women from entering the field, by being hostile toward women, and by actively discriminating against them through grades and research opportunities. Thus, departments of engineering or physics can comply with affirmative action by adding one or two women to their faculty without in fact diminishing the degree of indirect discrimination against women students.

Tokenism in student admissions at different levels has proved even more discriminatory and destructive for the women students involved. A recent study examined the nature of interactions that take place when a solo woman finds herself in a professional peer group, such as a group of psychiatric residents or psychiatric graduate students, and the effect these interactions have on the training and integration chances of the women (Frank & Wolman, 1973). The study showed that in each of the six peer groups observed, the men reacted negatively to the woman "intruder" in their all-male group and used a variety of techniques to neutralize her presence and preserve the all-male atmosphere and quality of interaction. Men continued to talk between themselves, intellectualizing feelings rather than expressing them as they are required to do during psychiatric training, because in this way they could emphasize their masculinity. Also men avoided pairing or in any way allying with the lone woman in order to avoid disrupting the cohesiveness between the male members or sharing her deviant and marginal role. The possibility for sexual attraction made the woman's presence even more threatening, since such an occurrence would constitute a highly disruptive element in the male relationships and friendships. Men handled this potentiality for sexual attraction by completely ignoring the woman's sexuality and by condemning her to a low and marginal status. Consistently the solo woman was defined as deviant, was isolated, and was made peripheral and marginal regardless of her behavior, her personality, or the type of coping techniques used. Thus, women are discriminated against by their male peers since their forced marginality seriously interferes with the outcome of their training. Some become so discouraged that they drop out altogether and others enjoy limited training experiences because they are excluded from the group (Frank & Wolman, 1973).

Some recent evidence is even more disturbing, indicating even when larger numbers of women are admitted to previously masculine professional schools, such as medical schools, institutional policies that require the subdivision of students into smaller groups serve to reduce the presence of woman to only one in each group. A recent survey of women medical students showed that they were told informally but firmly that no more than one girl should belong to each small instructional group of usually seven to eight students (Campbell, 1973). Sometimes the reason for this dispersion of women was clear and explicit: "Women shouldn't get together, so they start protesting, agitating, and all this Women's Lib nonsense." But even when the rationale was not explicitly stated, the results were clearly discriminatory against the women, as a recent study of such groups of medical students in an anatomy class showed (Frank, 1975). Similar to the fate of the solo psychiatric trainee, the solo female medical student in the instructional small groups in the anatomy class was totally ignored and excluded from the topical conversation by her fellow medical students, was made marginal, and had little chance to participate in the crucial training experiences (Frank, 1975).

All the above recent evidence from small-group research in the United States suggests that when overt sex discrimination becomes illegal, prejudiced individuals revert to subtler, informal sex discrimination that can be documented and combated only with great difficulty. This is the price that societies pay when legal and social changes take place before the large majority of individuals have values and attitudes consonant with these changes. It is interesting to speculate about the form that sex discrimination will take now that even these subtler techniques have been uncovered and made public. Will sexist people give up or become even more ingenious?

Content of Sex Discrimination

Turning now to the content of sex discrimination, we shall examine the accumulated evidence from a considerable number of research studies which have shown the dynamics of sex discrimination within the context of concrete settings. We shall limit our presentation to the educational and occupational setting for which there is sufficient research evidence. Most of the relevant research, especially with regard to sex discrimination at the elementary school level, has taken place in the United States and Canada. Whenever relevant research is available from the U.S.S.R., Sweden, Poland, or other countries, it will be incorporated into the discussion.

Sex Discrimination at the Elementary and High School Levels

At these levels, sex discrimination may be indirect, overt institutional, or informal. Indirect sex discrimination at the elementary school level has been mainly accomplished outside the schools in the family and by the mass media. Available research has amply documented that mothers and fathers behave differently toward daughters and sons from the time of birth (Lynn & Sawrey, 1962; Droppleman & Schaefer, 1963; Moss, 1967; Moss et al., 1969; Goldberg & Lewis, 1969; Lewis, 1972). Some of these sex-differentiated parental behaviors are of great interest because of the implications they have for the long-range educational behavior and achievements of daughters and sons. Boys, for example, are given more and earlier independence training (Collard, 1964); more punishment (Droppleman & Schaefer, 1963); and more encouragement intellectually than girls (Lynn & Sawrey, 1972). Mothers maintain physically close and affectionate relationships with their daughters for a longer period of time than with their sons (Lewis, 1972); they reward them more, and they punish them less. Daughters, therefore, tend to receive much more affection and approval while sons receive a better balance of positive and negative reactions from their mothers. Actually, girls seem to suffer from too much love and maternal concern. Some psychologists have pointed out that mothers and fathers tend to be much more anxious and protective toward their daughters than toward their sons and, therefore, even to encourage dependency in them as a guarantee that they will remain protected by the parents (Hoffman, 1975). Thus, despite the greater maturity and sturdiness of the female infant (Garai & Schienfeld, 1968), parents are anxious about the independent behaviors of girls and happy and relaxed over similar behaviors by boys.

As Hoffman (1975) concluded, a maternal sex-differentiated behavior that could be labeled "overhelp" may be the most detrimental behavior for daughters' development of independence and achievement motivation. If the parent responds to the child's crying or asking for help too quickly, the child never has a chance to develop the ability to tolerate frustration, to tackle the problem by itself, and to explore possible solutions. There is evidence that mothers tend much more quickly and frequently to help girls than boys when faced with a difficult task. Thus, girls learn to be dependent upon adults for help rather than trying to cope with problems and difficult situations and exploring solutions by themselves.

Furthermore, mothers place a greater degree of pressure for achievement and independence on their boys of pre-school age than on their girls. In addition, mothers tend to reward boys' aggression as appropriate "masculine" behavior while girls' aggression is never rewarded and only indirect expressions at best are tolerated. Mothers place pressure on girls for "feminine" neatness, obedience, and conformity while the pressure on boys is for independence and achievement (Hatfield et al., 1967). Another observation study showed, similarly, that fathers significantly more often positively reinforce dependent rather than independent daughters (Osofsky & O'Connell, 1972).

It seems that high achievement motivation in girls is fostered by exactly those parental behaviors which are the opposite of those fostering "femininity." Namely, achievement motivation is higher in girls when their mothers are less affectionate and less nurturant and when they set high standards for their daughters' intellectual achievement. Furthermore, daughters are more proficient in both reading and arithmetic achievement tests when their mothers hold high achievement expectations (Crandall et al., 1964). While the best condition for fostering "femininity" in girls appears to be maternal affection and nurturance (Hetherington, 1967), the best type of maternal behavior for high-achievement socialization is a balance of warmth combined with some punishment and distance on the part of mothers as well as high expectations for achievement and independence (Berens, 1972; Stein & Bailey, 1973). Thus, mothers' "over-affection" lavished on daughters represents the subtlest and sweetest but also probably one of the most potent types of sex discrimination. All these socialization studies, most of which are observational, suggest that girls and boys are differentially conditioned by their parents so that by the time they go to school, they:

(1) Are aware of existing sex role stereotypes and sex-appropriate behaviors.

(2) Have already been influenced by their parents' sex-differentiated behaviors such that girls have a greater tendency to be obedient, neat, passive, and dependent, and boys have a greater tendency to be aggressive, disobedient, independent, exploring, and creative.

These tendencies, instilled in children by parental sex role socialization and reinforced through all the books and comics they read and all the television shows and advertisements they see, constitute significant indirect sex discrimination since they pave the way for sex discrimination in school.

The more children advance in school, the more indirect sex discrimination builds up from grade to grade. The more intense the informal and institutional sex discrimination on the part of teachers, curriculums, readers, and school structures has been in early grades, the more indirect sex discrimination operates in later grades. Boys and girls tend increasingly to behave according to sex role stereotypes and further to justify teachers' sex-differentiated behaviors and expectations and all types of ongoing sex-discriminatory practices.

Once boys and girls start going to school (from kindergarten on), they are faced with a number of institutional sex-discriminatory features, most of which are quite overt. The first such feature is the sex composition of the faculty, which in most countries is quite skewed toward the female sex at the lower grades and increasingly toward the male sex at higher grades and in administrative positions. Probably the American case represents an extreme, since only 2 percent of the elementary school teachers are male while very few women are school administrators, but similar situations are replicated in several societies. Such a clearly sex-differentiated school hierarchy transmits the message to girls that women, even when they work, occupy subordinate positions in which they must obey men and abide by their decisions. Such a message is quite powerful in helping consolidate the effects of the continuous informal sex-discriminatory practices to which girls (and boys) are subjected.

Children are exposed to sexist books and illustrated material even before they can read and to clearly sexist texts from the time they can read. Content analyses of elementary school texts of all types (history, literature, and even arithmetic) carried out in the United States (DeCrow, 1972; Saario et al., 1973; Taylor, 1973; Frazier & Sadker, 1973; Levy & Stacey, 1973; Stacey et al., 1974); in Sweden (Fredriksson, 1969; Berg, 1969); and in Norway and Finland (Berg, 1969) show that readers not only reflect the sex stratification system in the society but even surpass reality by portraying an even more sexist society than is true at present. Fathers are presented as the sole breadwinners and decisionmakers and as exclusively involved in traditional stereotyped male activities. Mothers are depicted almost exclusively as homemakers and nurturers. When they are shown as working women, they are nurses, teachers, or secretaries. Furthermore, mothers are presented as dull, ineffectual, almost totally preoccupied with housework and shopping, incapable of problem-solving, and even stupid.

The sex-discriminatory power of such sexist school readers is enormous since children learn within the context of a lesson (hence within the context of official knowledge and wisdom), the appropriateness and even desirability of a sex stratification system in which women must occupy the subordinate position. Thus, all their previous perceptions regarding such a sex-stratification system become solidified with the seal of education and science. These sexist readers make children (especially boys) feel that sex discrimination is a "natural" process that everybody follows.

Probably the most effective type of sex discrimination to which school children are subjected is the informal set of sex-discriminatory behaviors on the part of teachers. It must be emphasized that, as is often true with informal sex discrimination, those who practice it may not be conscious of the nature of their behavior or of its implications and consequences for the students involved. This may be due partly to naivete concerning what behavior constitutes sex discrimination and partly to lack of understanding of the dynamics involved in the translation of a teacher's behavior or expectation into a student's behavior. A recent study (Chasen, 1974) illustrates well the above points.

The interviewed elementary school teachers felt that they treated schoolgirls and schoolboys equally in the classroom and resisted the implication of possible sex stereotyping in their behaviors or thoughts regarding their students. When asked specific questions about their beliefs and behaviors, however, it became clear that they held sexist beliefs and exhibited sex-differentiated behaviors that were discriminatory toward girls. They reported, for example, that they believed that boys are innately more aggressive and girls are innately more passive. They also admitted that they were actively discouraging aggressive behavior in girls (but not in boys), thus facilitating a self-fulfilling prophecy. Teachers reported that aggressive behavior in teacher-child interactions was encouraged more in boys than in girls. Furthermore, teachers reported feeling boys' muscles more frequently than girls' and telling boys more often than girls that they were strong. They encouraged boys to do woodworking, while girls were mostly encouraged to do collage—a sedentary, passive activity. More specifically, the majority of the teachers said that they often encouraged boys to play with blocks or to do woodworking while only a few of them encouraged boys to play with dolls. It is interesting to note that there was emotional resistance on the part of the teachers to boys' playing with dolls or to girls' playing with blocks (Chasen, 1974).

A number of observation studies conducted in American elementary and high schools have documented the teachers' sex-differentiated behaviors that constitute a different type of sex discrimination directed toward boys and girls.

Some findings show that teachers praise as well as criticize boys more frequently than girls. One observation study concluded that boys were asked more direct questions by the teacher than girls. Boys were also praised more frequently when they gave correct answers and criticized more often for incorrect answers or failures to respond (Brophy & Good, 1970). These findings are significant because they indicate that the teachers' sex-differentiated behavior tends to place a greater pressure on boys than on girls to achieve a pattern that reinforces the one produced by similar sex-differentiated parental behaviors.

Research findings indicate that teachers interact much more often with boys than with girls, and these interactions are both positive and negative. One observation study concluded that boys had more interactions with the teacher than girls and appeared to be generally more salient in the teacher's perceptual field (Brophy & Good, 1970). Another observation study of seventh and eighth grade classrooms concluded that boys were more active and interacted more frequently with teachers and that boys received more contacts from teachers, both positive and negative, while girls received fewer contacts but proportionately more positive ones (Good et al., 1973). In terms of these findings, girls seem to be against discriminated in that they have fewer contacts and interactions with the teacher and are experiencing a less stimulating school environment than boys.

Researchers have found that teachers approve of girls more than boys because they fit better the desirable institutional-type behavior of dependent, docile, passive, and obedient children who do not disrupt the classroom routine. One study showed that student teachers prefer students described as dependent, passive, and acquiescent and react less favorably to students portrayed as independent, assertive, and active. In fact, all student teachers, men and women, assign the highest mean preference rating to conformist, rigid girls while the independent girls receive the lowest ratings (even lower than independent boys, who seem to be better tolerated) (Good & Grouwns, 1972). Thus, it seems that the teachers' ideal of a schoolchild coincides with the "feminine" stereotype, a fact that may appear to be beneficial to girls in the short range but which is clearly detrimental to them in the long range.

Already socialized at home and by the media to behave according to sex role stereotypes, girls receive a very powerful reinforcement to do so through the teachers' approval and rewards, including good grades. This process proves detrimental to girls after a few years since they become locked into their sex roles and socialized to habitual modes of behavior, which are essentially incompatible with autonomy, independence, and assertiveness—characteristics associated with achievement and with competent and effective adult functioning (Grambs & Waetjen, 1966; Sadker & Sadker, 1972; Lee, 1973).

Boys, on the other hand, because of their "masculine" socialization already begun at home, tend to displease teachers and attract their punishment and criticism but are able to maintain their high level of activity as well as their autonomy, independence, assertiveness, and intellectual curiosity. Boys can, thus, attract a greater share of the teacher's attention and possibly become further stimulated by such interactions. The teachers' tendency to give lower grades to boys than to girls (partially as a punishment for disruptive behavior) may, in some cases, tend to reinforce boys' relatively greater emphasis upon learning rather than upon pleasing the teacher or obtaining good grades.

Gender and scholastic achievement have been shown to be mutually interactive variables that affect the teacher's behavior toward the students. More specifically, available research indicates that teachers tend to tolerate low-level scholastic achievement better in girls than in boys since, according to sex role stereotypes, boys are clearly supposed to be leaders and to achieve highly (Lippitt & Gold, 1959; Good et al., 1973). Because of teachers' high expectations for boys, their failure to achieve is punished with disapproval and rejection while the teachers behave more cordially to girls with similar low-achievement levels (Lippitt & Gold, 1959). The more recent study (Good et al., 1973) showed that low-achievement boys are especially likely to be highly criticized by teachers, to receive little teacher feedback about their academic work, and to get little opportunity to respond. The study showed that while high-achievement boys have more frequent and more supportive contacts with teachers than high-achievement girls, low-achievement boys have fewer and more negative contacts with teachers than low-achievement girls (Good et al., 1973). Low-achievement girls have social approval for "being nice" as an alternative to high scholastic achievement, while the only alternatives open to low-achievement boys are athletic prowess or aggressive behavior (Caplan & Kinsbourne, 1974).

Thus, girls are again discriminated against whether they are high or low achievers. When they are high achievers, they have less interaction with and less supportive feedback from teachers than high-achieving boys. When they are low achievers, they are under less pressure to strive toward a higher level or alternative types of achievement since they are still liked and approved of by the teacher, as long as they stay quiet, compliant, and dependent. It also seems that low-achieving boys are discriminated against by the extreme pressure placed upon them to achieve and the painful social rejection inflicted upon them when they fail to fulfill the sex-appropriate level of achievement.

Sex Discrimination in Higher Education

At this level, indirect sex discrimination becomes very important because of the considerable discrimination that has already taken place at lower levels. Because women are "cooled out" of science and mathematics courses in high school, most of the "masculine," high-prestige academic fields in college are closed to them because of their poor background (Flanagan, 1966). Also, because vocational counselors in high school as well as parents have already discouraged girls from entering high-prestige, "masculine" fields, there is often no need to apply further sex-discriminatory rules and practices at the college level. Women have been convinced to stay in "their place," that is, to enter the few appropriate "feminine" fields, if they go to college at all.

Another type of indirect sex discrimination at the college level takes place because women are discriminated against when they get married or have children. Discrimination in this area results from the fact that they are assigned the major (if not the exclusive) responsibility for household tasks and childcare. Thus, a high school marriage or a marriage right after high school graduation drastically diminishes a woman's chances of attending college (Ludeman, 1961). Also, married women in general enroll as graduate or undergraduate students in smaller numbers than single women and tend to drop out of college in larger numbers than single or divorced women (Feldman, 1973; Lord, 1968). Because women have to follow their husbands wherever their job or education takes them, they usually lose credit hours in transferring from one university to another and have their training lengthened by having to satisfy different sets of requirements (Pullen, 1972; Ruslink, 1969; Shoulders, 1968; Cless, 1969).

Until recently in the United States and in many other nations, overt institutional sex discrimination was best illustrated by the sex-segregated colleges and universities. Repeatedly courts had been reluctant to recognize sex segregation as similar to race segregation and to outlaw sexist admission policies at the college and university level (Shaman, 1971). The arguments were that there are many different women's as well as coeducational colleges and universities that women can attend and that many of the women's colleges are of high quality. Even when a college is not accessible to a woman in the town or city where she lives, she can always go to a college in another city (Shaman, 1971). Neither of these arguments is valid. In most societies, sex segregation at the higher education level constitutes sex discrimination because men's colleges are usually more richly endowed, offer a greater variety of courses and curriculums--including those preparing students for high-prestige, "masculine" fields--have better teachers, and enjoy a better academic reputation (Shaman, 1971; Bunting, 1961). Furthermore, moving to another city or another State in order to attend a college that offers the desired curriculum makes education much more expensive for women (since they can no longer live at home) or outright impossible (when they are married and cannot move away) (Shaman, 1971; Ewald, 1971).

A different type of blatant institutional sex discrimination concerns imposing quotas limiting the number of women admitted to engineering, medical, and law schools, as well as graduate programs (Cross, 1971; Phelps, 1972; McBee & Suddick, 1974). Women are thus discriminated against regardless of whether they are qualified or not. Only outstanding women are admitted; otherwise men are preferentially admitted even if less qualified than the women applicants (Cross, 1971; McBee & Suddick, 1974). Clearly, average women do not stand a chance (Werts, 1966; Waltser et al., 1971; Hunter, 1967). The degree of discrimination against women applicants is much greater in prestige universities than in other universities (Solmon, 1974).

There are also discriminatory policies regarding some types of financial aid available to men and women college students. First, a number of fellowships and scholarships connected with athletics or Reserve Officers' Training Corps are open only to men. Second, fewer women are given part-time research assistantships, which provide not only adequate financial aid but also valuable research apprentice experience (Solmon, 1974). Third, in "masculine" fields, women are less often appointed teaching assistants since there is a reluctance to have women teach men students (Harris, 1970). Finally, discriminatory university policies exclude women but not men fellowship applicants on the basis of their spouse's income, policies that seriously discriminate against middle-income married women who want to attend graduate school. Such women, regardless of merit, must either work part time (something often very difficult because of their familial responsibilities) or be financially dependent upon their husbands, who often at least mildly disapprove of their attending graduate school.

Disguised sex discrimination has been increasingly relied upon during the last decades in countries such as the United States, since it tends to be more socially acceptable than overt sex discrimination. The best examples of such discrimination at the university level are the following.

(1) The existence of a more or less formal age limit in admissions. It discriminates primarily against women who return to college (at the undergraduate or graduate level) at age 35 due to the prevailing discriminatory division of labor within the family (Blackwell, 1963; Lyon, 1964; Randolph, 1965; Johnstone & Rivera, 1965; Hunter, 1967).

(2) Strict rules and policies regarding the transfer of credit hours. Again they discriminate primarily against women who often must transfer due to their husbands' moves (Shoulders, 1968; Cless, 1969; Ruslink, 1969; Pullen, 1972).

(3) Requirements of full-time attendance throughout the entire training (or at least for 1 to 2 years) in graduate programs and professional schools. These rules act as powerful barriers to women's entry (Myers, 1964; Riesman, 1965; Hembrough, 1966; Cless, 1968; Bunting et al., 1974). Women's frequent inability to attend full time is due to indirect sex discrimination within the family (discriminatory division of labor) and to some extent to their lesser access to scholarships and fellowships because of overt or informal sex discrimination. Thus, many qualified and interested women cannot become physicians, lawyers, pharmacists, researchers, or university professors when they are young. They have to postpone their studies until their children are grown up, at which time they are discriminated against on the basis of age.

When all other types of sex discrimination have been unsuccessful in keeping women out of the university, "masculine" fields, or the graduate program, sexist faculty and administrators can still screen women out by means of informal sex discrimination. Women are "cooled out" by means of a number of techniques and strategies that can be grouped into three major categories.

(1) Humiliation or severe psychological harassment and intimidation (Campbell, 1973).

(2) Belittling; ignoring the existence of women students, even when they represent 25 percent of the student body in a masculine field like medicine; and rejection of women as intellectual beings (Campbell, 1973). A study at the University of California at Berkeley reported that women students were significantly less often than men treated as colleagues or apprentices by their professors not only in "masculine" fields such as mathematics and the biological sciences but also in psychology, sociology, history, and anthropology. The same study showed that women students are taken less seriously professionally by their professors even in the advanced years of graduate school and that these subtle but potent discriminatory behaviors constitute the underlying reason for women's dropping out of graduate school (Sells, 1973).

(3) Preferential treatment of men with regard to research assistantships and opportunities for research experience.

Clearly, the only women who have a chance to enter and, more important, to graduate from "masculine" fields, professional schools, and graduate programs have the highest qualifications; are the most stubborn and resilient, with strong nerves and a "thick skin"; and have sufficient income to allow them to attend on a full-time basis (when they are not granted a fellowship) by hiring domestic help. This portrait of the women who can enter professional schools and graduate programs and succeed in "masculine" fields makes it apparent that women are overwhelmingly discriminated against in many ways at the university level.

Occupational Discrimination

In most countries educational discrimination diminishes before occupational discrimination, in terms of both attitudes and behaviors. In Greece, for example, it is widely accepted by now that women should have equal educational opportunities with men at all levels (Safilios-Rothschild, 1972a) and, in fact, an equal percentage of men and women complete high school, while 31.6 percent of women attend college (*Statistical Yearbook of Greece*, 1973). When, however, it comes to women's employment, only about one-third of men and women think that married women should work (Safilios-Rothschild, 1972a) and, in fact, only 27.8 percent of Greek women do work (*Statistical Yearbook of Greece*, 1973). Thus, women are often not allowed entry into an occupation, even when they are qualified to do so; and if they manage to enter an occupation, they are invariably discriminated against in a variety of ways—treatment discrimination (Terborg & Ilgen, 1974; Levitin et al., 1971).

A basic *entry* type of occupational sex discrimination carried out by means of indirect, institutional, overt, and informal strategies, policies, and rules refers to the labeling of occupations as "masculine" and "feminine." This labeling is discriminatory because in all societies and periods the occupations that are classed as "feminine" are the low-status, low-pay, auxiliary occupations or the monotonous, routine jobs that men are willing to relegate to women. Men, on the other hand, keep for themselves the occupations of higher prestige and pay as well as those that are more interesting and provide access to power. Whenever an initially low-status and low-pay occupation, due to ongoing social changes, becomes more prestigious, better paid, or vested with some power, it becomes reclassified as "masculine," and men start to dominate it. The reverse occurs when an occupation becomes reclassified as "feminine." The occupation of secretary is a good illustration of an occupation which in many African countries is still relatively well paid and prestigious and is dominated by men. In Western societies, on the other hand, where it carries little prestige and where administrative positions are better paid and more promising, secretarial jobs are held by women, while men with the same educational qualifications can enter administrative jobs labeled "masculine" (Safilios-Rothschild, 1974a).

It is important to note that the sex labels attached to occupations are usually justified on the basis of sex role stereotypes and varying interpretations of sex-related characteristics. In the U.S.S.R., medicine is labeled a "feminine" occupation because it is a relatively low-status and low-paying occupation, but the label is justified in terms of women's nurturant "nature" (Goldberg, 1972; Dodge, 1966). In the United States, however, where medicine is a highly prestigious and very well-paying occupation, it is labeled "masculine," and the label is justified on the basis of the high degree of commitment necessary that women are unable to make because of their familial responsibilities. Actually, of course, the usual justification of the built-in flexibility in occupations labeled "feminine" (such as teaching in elementary school) is false. In fact, many of the occupations labeled "masculine" do have much more flexibility (Safilios-Rothschild, 1972b). Occupations such as medicine, dentistry, pharmacy, research work, or teaching at the university level labeled "masculine" in the United States and several other societies, can provide considerable flexibility because the professional can largely set his/her own hours and can work fewer than 40 hours per week in an office setting. In some societies, of course, such as Finland, Hungary, Poland, the U.S.S.R., Denmark, and Greece, pharmacy and dentistry have recently become predominantly "feminine" occupations (or equally open to both sexes) partly because of this built-in flexibility (Safilios-Rothschild, 1972a).

When women do become trained for a masculine field because of their outstanding qualifications or different combinations of circumstances, entry discriminatory practices tend to screen them out or to relegate them to lower positions with less pay and fewer advancement probabilities than are offered to men. Studies of university administrators (Simpson, 1970; Fidell, 1970) and bank supervisors (Rosen & Jerdee, 1974) have shown that qualifications being equal, a male candidate will be chosen over a woman unless the woman is clearly superior. Furthermore, women may not have access to prestigious positions simply because they lack the information about these jobs and because they are not recommended for these jobs by powerful, top-ranking men in the field. Most of the jobs in academia as well as industry at high levels, especially the "plums," have always been filled through the informal "buddy" communication network between males (Epstein, 1970). But the existence of similar buddy systems among salesmen, skilled workers, construction contractors, union leaders, and so on has been all too powerful in keeping women out of a wide range of positions in all types of "masculine" occupations. The recent requirement in the United States and some other societies for wide advertisement of openings has, to some extent, mitigated but by no means neutralized this type of occupational sex discrimination. Probably the development of an equally powerful women's communication network can help fight effectively this type of sex discrimination, as the recent experience of American professional women has proven.

Finally, an indirect type of sex discrimination in the family system, resulting from the wife's (legal and social) obligation to go where her husband's job takes him, is still drastically limiting women's geographic mobility and their degree of access to jobs, particularly desirable jobs. Despite the few sensational reported cases in which professional couples in the United States or Sweden live in different cities in order for both to be able to hold their jobs and despite the fact that some men in the academic field and industry will not consider an offer unless job opportunities (or, more rarely, an offer) are available for their wives, these cases still represent the minority. A recent study of women microbiologists reported that 93 percent of the women doctorates would be willing to move only if their husband could find a satisfactory position in the same location before moving, but only 20 percent of the men made such conditions for their wives' employment (Kashket et al., 1974).

But even when women are hired, treatment sex discrimination continues. The available evidence indicates that they are consistently offered, on the average, lower salaries than men regardless of their qualifications (Terborg & Ilgen, 1974). These salary differentials may represent partly blatant and partly indirect sex discrimination due to women's older average age, recommendations from less powerful people, graduation from less prestigious schools, or lack of valuable research or apprentice experience. With respect to advancement and promotions, all types of sex discrimination continue to operate and to become more overt and clear cut the more women do well and aspire to top decisionmaking and policy positions (Miller et al., 1974). Women are, in fact, most often bypassed, either openly or increasingly under some socially acceptable pretext, for promotions that would place them in supervisory positions over men, even when they are the best qualified for these positions (McCune, 1970; Kashket et al., 1974).

Promoting a woman to a supervisory position over men would, in fact, break down the prevailing sex stratification system, and that is why the reluctance to do so is great and the resistance very strong. Several studies of male managers (Bass et al., 1971; Gilmer, 1961) and bank supervisors (Rosen & Jerdee, 1974) showed that not only do they hold stereotypic views of women, but they also have less confidence in the ability of a female supervisor than a male supervisor, and they would feel uncomfortable with a woman supervisor. These strong resistances to having a woman supervisor explains why men occupy the top administrative (or all administrative) positions even in occupations dominated by women, such as social work, elementary school teaching (Lyon & Saario, 1973), and librarianship. A recent American study showed that among librarians, women can get promoted to top positions and have power only in subspecialties, such as school librarianship, in which only 6 percent are men. In other subspecialties, such as academic librarianship, in which one-third are men, this minority controls all top positions of power in the field (Kronus & Grimm, 1971). Similar patterns have been documented for Poland (Sokolowska, 1965) and the U.S.S.R. (Dodge, 1966).

Often women can be bypassed for promotions because, by means of a variety of discriminatory practices and behaviors, they have not been given the opportunity to acquire the necessary qualifications and experience. They are given fewer chances to gain experience in challenging, responsible assignments (Terborg & Ilgen, 1974; Kay, 1972) and to participate in management training (Rosen & Jerdee, 1974). They are less often invited to present papers (Yokopenic et al., 1974), to write chapters in influential books, to become visiting lecturers, to serve on review and editorial boards (Kashket et al., 1974), and to temporarily take the place of the sick supervisor or the absent boss. Thus, eventually they can be more "objectively" discriminated against in terms of raises, promotions, and other occupational rewards.

One of the most painful and effective informal techniques of occupational sex discrimination to which women are subjected is rejection and an atmosphere of "cold war," the intensity of which increases as they prove to be more competent, ambitious, and successful (Hagen & Kahn, 1974). The more women improve their position in an organization, the more they tend to lose the friendship and respect of their colleagues (Miller et al., 1974). Thus, when men have to recognize a woman's competence and allow her to achieve significantly, they punish her psychologically for her deviance by withdrawing their friendship, approval, and liking, thus forcing her to a painful isolation that dampens her success.

It seems, therefore, that a woman who attempts to break through the existing sex stratification system by entering a "masculine" field or by aspiring and achieving highly (and, thus, acquiring prestige and possibly also power and a higher income) must be a unique being to be able to survive all the types of sex discrimination to which she will be subjected. She must be a very strong person not to bend under the harassment or the derogatory remarks of teachers and peers. She must be intelligent, competent, and hard working in order to be able to make it without any encouragement so that she can continuously prove she is superior to most men. And, finally, she must be independent enough to be able to go on despite psychological rejection and active dislike on the part of colleagues and acquaintances. This has been the essence of sex discrimination: While many men, even mediocre ones, can enter prestigious fields, compete, aspire, and achieve as highly as they can, it is only the unusual woman, intellectually and psychologically, that can enjoy the same options.

Part V.

Sex Stratification

10. SEX AND OTHER STRATIFICATION SYSTEMS

Until recently, theorists, particularly those working with stratification, have resisted studying sex as part of a stratification system equivalent to those that are racial or ethnic. The reason for this could be that the stratification theorists belonged to the privileged sex, and since the sex ranking was not a problem to them, they never perceived it as a stratification criterion. Because these theorists accepted the sex role ideologies, they also accepted sex ranking as a manifestation of biological differences (Berreman, 1972; Millet, 1970). Some theorists, especially in the late 1960's, considered the possibility of a sex stratification system, but they usually rejected it because substantive issues, such as the mode of recruitment, socialization, membership, and structural arrangements of people in sexually ranked categories, seemed more important.

According to Berreman (1972), although sex is determined at conception, it is neither contingent on ancestry, endogamy, or other arrangements of marriage or family nor predictable. He notes that the significance of sexual differences is, however, largely defined socially; cultural expressions vary widely over time and space. As a concomitant, males and females have no distinct ethnic or regional history, but they do have distinct social histories in every society. The universal coresidence of males and females within the household has precluded lifelong separate male and female societies. But this arrangement does not preclude distinct male and female social institutions, patterns of social interaction within and between these categories, or male and female subcultures and dialects.

Berreman does not discuss the fact that many societies with rigid sex stratification systems have definite rules of spatial segregation between men and women. Houses in such societies have separate female parts and strict rules about when and under what circumstances one sex is allowed to cross into the other sex's part of the house. Furthermore, the distinct patterns of educational and occupational segregation, prevalent in most societies to varying degrees and forms, indicate a considerable extent of physical, spatial, and sociopsychological segregation between men and women. Even within occupational settings in which both men and women are working, there are usually parts designated as "male" settings and others as "female," a separation used to accentuate women's subordinate status.

According to Berreman (1972), if one accepts van der Burghe's statement that "race can be treated as a special case of invidious status differentiation or a special criterion of certification" (van der Berghe, 1967), sex must also be accepted as a criterion of stratification. In most societies, the relationship of males to females is a lifelong superiority-inferiority one based either on the characteristics of birth-ascribed separation and stratification or inborn psychological and social consequences. Both stem from similar factors in early socialization and from stereotypes and prejudices enacted and enforced by differing roles and opportunities, rationalized by ideologies of differential intrinsic capabilities and sustained and defended through the combination of power and vested interest that is common to all birth-ascribed inequality. Berreman points out that the biological rationale has been used as the justification for sex discrimination, as it has for all birth-ascribed, dominance-exploitation relationships (be they caste in India or ethnic or racial discrimination). Such a rationale implies real, significant, unavoidable, and natural differences that must be acted upon (Berreman, 1972).

Review of Conceptualizations of the Sex Stratification System

Margrit Eichler (1973b) is one of the few theorists who have examined in some detail the different concepts of the sex stratification system: as a caste system, a social class system, or a minority group. She notes that the concept of women as a caste proposed by Myrdal (1944) implies a permanent rather than a temporary disability because of ascribed characteristics, a closed rather than an open system, a rigid caste line but variable caste relations, and, of course, a strict interdiction of intermarriage. Andreas (1971) devised a similar theory of sex stratification as a caste system.

Eichler, however, thinks that the concept of the power relationship between men and women as a caste system does not represent the current situation. She points out that, despite the fact that sex is birth ascribed and there is a hierarchical grading of the sexes, women are not endogamous and do not have a distinct culture in the sense of a caste culture. It is true that there is something that is loosely called "women's world" and "men's world"; sex segregation at social gatherings; different areas of concern by sex; different types of dress; different types of relationships both within one sex and between the sexes, such as sex-specific grooming and dating behavior; sex-specific leisure activities; and stereotyped perceptions by members of each sex about themselves and the other sex. But there is also a fairly wide area of overlapping behavior, especially between employed men and women (Eichler, 1973b). Furthermore, there is no doubt that the range of social and economic differences within one sex is as great as that between the sexes. Although women as a group are economically, socially, and politically underprivileged, there is no doubt that some women are better off economically and socially than some men. Amundsen (1971) also found the caste system too extreme to explain the power relationship between men and women. There are too many exceptions to the rule to assume a rigid stratification system such as the one suggested by caste.

Eichler (1973a) also criticizes Lenski's concept of women as a class, "an aggregation of persons who stand in a similar position with respect to some form of power, privilege, or prestige" (Lenski, 1966). Eichler found this analysis unsatisfactory since it did not allow for a distinction between employed and unemployed women and treated marriage and employment as if they were mutually exclusive for women. Lenski (1966) claimed that competition through marriage is the least risky route for women. Through marriage, women can obtain a substantial interest in their husband's income, enter into exclusive circles, and have the leisure to do the things they wish, that is, achieve the route to vicarious achievement as defined by Lipman-Blumen (1972). Eichler criticizes this concept because marriage and the economic roles of women are not mutually exclusive, and increasing numbers of women are competing simultaneously in the economic and marriage markets. Furthermore, economic competition differs in nature because it is between men and women as well as among women; in marriage, the competition is only among women, with men as the prizes (Eichler, 1973).

In the class analysis of women described by Benston (1969), the roots of the secondary status of women are economic, and women as a group have a definite relation to the means of production, although different from that of men. Benston wrote that women can be defined as a group of people responsible for the production of simple use values in those activities associated with home and family. These use values are contrasted with exchange values, which are related to commodity production and characterize the work of most men. Although women do work for wages, as a group they have no structural responsibility in this area, and such work ordinarily is regarded as transient. Consistent with the emphasis on household labor, Benston (1969) argued that essentially housework has not been industrialized or accepted on an equal basis with other means of production, such as those for which men are primarily responsible.

In discussing Benston's concept, Eichler pointed out that none of her arguments seems to be substantiated by existing evidence. Benston's class analysis suffers because, although it includes all women, she makes her definitions and observations applicable only to nonearning housewives. Hence, Eichler concluded that Benston's analysis is incomplete and cannot be applied to all women.

Finally, Eichler examined concepts of women as a minority group. As early as 1951, Hacker defined women as a minority group, although the majority of women did not then display a minority group consciousness (thus deviating from at least one of the defining characteristics of a minority group). She based her concept on the fact that women manifest many of the psychological characteristics imputed to self-conscious minority groups, such as group self-hatred (exhibited in a person's tendency to denigrate other members of the group), acceptance of the dominant group stereotypes, and attempts to distance oneself from the group (Hacker, 1951). Another sociologist, Jochimsen, also elaborated on the characteristics of minority group behavior among women. She listed the following traits: self-hatred, low self-image expressed in the need to be admired by others, exaggerated egoism, ceaseless self-reflection, hatred for others, resignation, and extreme boredom. According to Jochimsen, the overall lifestyle, patterns of thought, and forms of women's behavior could only be described as demoralized (Jochimsen, 1969).

Eichler (1973) correctly pointed out that the concept of women as a minority group tends to put too much emphasis on the results of the existing power relationship, in which clearly men are dominant and women are subordinate. It does not say anything about the nature of the power relationship, as attempted in a class and caste analysis. Eichler goes on to make a fundamental distinction between women's derived and individually achieved status. A woman obtains derived status by her association with a man—either her father (as long as she is unmarried and to some extent indirectly even after she is married) or her husband. Women who do not have an individually achieved status derive it from a man, and thus they are dependent on men for their status. Eichler, therefore, suggested that there is an overlap between the sex stratification and the social stratification systems: If only the derived socioeconomic status of women were examined, women would be consistently ranked according to the status derived from their husbands. Therefore, although wives are considered to have lower status than their husbands, they are often assigned higher status than men ranked lower than their husbands. This evaluation takes place regardless of the woman's personal qualifications.

However, when the social stratification of employed women is considered, women differ from men in at least two dimensions: they are underrepresented in the upper strata; and, within each stratum, they occupy a lower level than men, even within female-dominated occupations, such as librarian (Blankenship, 1967; Archibald, 1970; Judek, 1968). Since increasingly more married women are employed, the two statuses (individually achieved and derived) are not entirely unrelated and tend to overlap. Not only can a woman occupy both statuses, but she can also pass in and out of either, by terminating or beginning work again or by marrying or divorcing. If the gap between the derived status and the actual independent status is too great, the higher status can carry over to the lower one, since the woman's derived status was always assumed to be above or at least equal to her individual status (Eichler, 1973). Increasingly, there is a need to analyze the theoretical implications of the reverse situation (Watson & Barth, 1964). Eichler's analysis was important because it introduced the concepts of women's derived and individually achieved status in the sex stratification system and its overlap with the social stratification system.

Safilios-Rothschild (1975) used Eichler's concepts of derived and individually achieved status and applied it to both spouses, since husbands can also gain positive or negative status from their wives' wealth or occupation. She showed how a sex stratification system exists by indicating how it operates when the two spouse's statuses do not coincide, especially when the wife's individually achieved status is much higher than that derived from her husband or when the husband's derived status is higher than his individually achieved status. In both cases, because the status configurations challenge the status hierarchy dictated by the sex stratification system, a spouse could be penalized by being granted a status lower than either type warrants.

Collins (1971) is another theorist who descibed man-woman relationships as a sex stratification system. According to him, women constitute the subordinate class because women take orders from men, but can give orders only to other women (only men can give orders to men). This principle is, of course, modified when the sex stratification system interacts with other systems that might place a higher status woman in a position to give orders to a lower status man. According to Collins, the sex stratification system came about because men could physically dominate women who were vulnerable because they traditionally bore and raised children. This system is maintained as long as women do not have equal status or access to status lines. They, therefore, make their sexuality a scarce commodity to be exchanged for men's status lines; in return, men have exclusive sexual rights to their wives. Collins' (1971) theory about the unequal exchanges between husbands and wives coincides with those of Safilios-Rothschild (1976, 1977a).

If sex stratification exists, there should be evidence of unequal distribution of wealth, power, and prestige based on sex or, as Eichler (1974) calls it, of "sex status." If a sex stratification system is to be accepted as a real stratification criterion operating within American society, it must explain these differences on the basis of sex rather than class, race, or ethnicity.

A recent study, using sophisticated techniques of data analysis (path analysis and regression coefficients), definitely established that sex was the most significant direct and unmediated depressant on actual educational attainment. This effect remained despite simultaneous controls on a large number of educational variables, such as academic ability, social class background, performance, educational goal, academic self-concept, curriculum enrollment, and the influences of significant others, such as parents, teachers, and peers (Alexander & Eckland, 1974).

This study replicated earlier data by Sewell and Shah (1967, 1968), since social class background influences were shown to be a double liability for women. These influences were found to be considerably more determinant of high school process and outcome variables for females than for males, while academic ability was more important for males. That these results were consistent for both educational goals and attainment suggests the importance of sex role socialization in explaining at least some differences. This interpretation is reinforced by Sewell and Shah's (1967) finding that even when social class background and ability are controlled, females are less likely to plan for, attend, and graduate from college.

Finally, the study by Alexander and Eckland (1974) showed that women are more influenced than men by family origins (social class and mother's education) than by ability, more so in high school than in college. In high school, the women take courses to prepare them for college, and their class standing is influenced more by their socioeconomic status than by their ability. The reverse is true for men. But in college, these trends are tempered (Alexander & Eckland, 1974). These latter findings are at odds with those reported earlier by Sewell and Shah (1967) and suggest that the role of sex in the college attainment process merits further study.

It seems, therefore, that sex status is an important factor in determining the educational chances and attainment of both men and women, the effects of which cannot be explained by other stratification criteria, such as socioeconomic status or ability. It is worth noting that in 1977, when considerable "cracks" existed in the sex stratification system, as many men as women were enrolled in college (Magarrell, 1978). Sex status remained, however, an important factor for those who received a Ph. D. degree or attended professional schools (Safilios-Rothschild, 1978).

Additional evidence that sex is a real stratification criterion comes not only from the fact that occupations are labeled as "feminine" or "masculine" in all societies, but also that feminine occupations have less prestige, pay, and decisionmaking power. Female occupations usually depend on cheap labor; they also do not require much training, career continuity, long-range commitments, or extensive sacrifices of time and energy (Kincade-Oppenheimer, 1968). Working women also tend to occupy the low-status, low-prestige, and less powerful jobs. For example, female clerical workers are file clerks and typists; in the school systems the women are teachers and the men are administrators; as service workers, women cluster in the lowest paying domestic jobs, below porters and janitors (male jobs). Even within professional occupations such as law, women primarily are found in low-ranking specialties, such as matrimonial and real estate work. Women doctors cluster in the lower ranking areas of public health and psychiatry (Epstein, 1972).

Men and women in the same occupation do not have the same occupational prestige. Most studies found that even when a woman has a high-prestige job, she usually has lower prestige than men in the same occupation because sex status is more important than occupational status. Thus, the occupational prestige of a given occupation varies with the gender of its incumbent. Walker and Bradley (1973), for example, found that women in "masculine" occupations had less prestige than men in the same job, but men in "feminine" occupations had about the same prestige as their female peers. Men, therefore, were penalized for relinquishing their superior position by entering a "feminine" occupation and were not given more prestige than women. In another study, Nilson (1972) found that both men and women in sex-inappropriate occupations had lower occupational prestige than men and women in sex-appropriate occupations.

In a later study, Nilson (1976) replicated her earlier findings, but also found that men in "feminine" occupations were penalized more than women in "masculine" occupations. The explanation for the latter finding seemed to be that women in "masculine" occupations received a higher status, but men in "feminine" occupations were downgraded and, therefore, viewed less favorably than the transgressing women. Bose's (1973) data regarding the lower prestige of women in prestigious or "masculine" occupations agreed with the above evidence. In "feminine" and low-status occupations, women were assigned higher prestige than men.

These American data agree with those from other countries. A study conducted in Zambia showed a significantly lower ranking of prestigious occupations when the incumbents were females; this trend was particularly true for male respondents (Hicks, 1969). Nuthall (1969) found that in New Zealand the sex of the incumbent was important in producing differences in the status rankings of occupational roles. The data indicated a consistent tendency for teaching as an occupation to be held in slightly higher regard for women than for men. The study suggests that when a man enters a female occupation, he challenges the sex stratification system and is penalized by being assigned lower occupational prestige (Nuthall, 1969).

It seems, therefore, that men and women who challenge the sex stratification system by occupying sex-inappropriate occupations tend to be penalized by receiving less prestige and that sex more than occupation determines prestige.

The latter holds true, however, only in the case of women, since men tend to be penalized more than women when they occupy "feminine" occupations, which often imply a downgrading status for men.

Besides lowering the assigned occupational prestige of women who occupy "masculine" occupations, demographic, historical, and experimental evidence shows that when a number of women enter a previously masculine occupation with high prestige and high pay, the prestige and pay of that occupation tend to drop, and men tend to abandon it. Thus, the occupation becomes redefined as feminine, and the prevailing sex stratification system is not disturbed.

Gross (1967) also noted that the demographic findings on changes in the sex structure of occupations might indicate that whenever large numbers of women enter an occupation, men begin to seek employment elsewhere. A historical analysis of the percentage of females within selected occupations in Canada from 1931 to 1951 showed a clear and consistent pattern: When women went into an occupation, the average income of that occupation seemed to go down. However, when men entered a new occupation, the average income seemed to go up. This pattern indicates that sex composition of an occupation partially determines the monetary value put on the services performed (Eichler, 1974).

Finally, experimental evidence supports the theory that the movement of large numbers of women into a prestigious occupation reduces its prestige. In one study, when subjects were led to believe that the proportion of female practitioners in a high-status occupation would increase, they evaluated the prestige and desirability of the occupation much lower (Touhey, 1974).

The fact that significant income differentials have been reported between men and women even when their education, training for a particular job, or seniority are the same further supports the existence of a sex stratification system.

One study using 1960 U.S. census data found that a rank ordering of gross categories by median earnings revealed important discrepancies between females and males. The major one, for the sales category, ranked seventh for females and fourth for males. The most remunerative occupational category for females (professional) corresponded to the seventh-ranked category for males (laborer). In addition, for females, median earnings of blue-collar gross categories ranked above those for the sales category. A different type of occupational ranking seems relevant to the earnings of women in different occupational categories, and this system of ranking does not overlap with that for men. This evidence strongly indicates the existence of a sex stratification system based on the distribution of income by occupational categories.

In 1974 women earned only about 60 percent as much as men. This gap was still larger in sales and high-level professional positions (Handbook on Women Workers, 1975). Although by 1977 women's college enrollment included several high-prestige fields, 40 percent of employed women still concentrated in 10 fields in which women comprised 70 to 80 percent of the workers. This clustering contributed to their low wages.

To summarize, sex status is an important stratification criterion since:

- Women do not have the same educational aspirations and attainments as men, especially at high levels.
- Women are restricted to "feminine" types of training and education which usually do not prepare them for professional jobs, but only for auxiliary, low-paying, low-prestige occupations.
- Women, even when they are educated for high-status, sex-inappropriate occupations, have less chance than men to get a job, and when they do, they are usually assigned to lower status positions.
- Women have much less chance to be promoted or to receive equal pay for equal work.

Sex is a criterion used to distribute prestige and wealth as well as power. Even when women occupy power-invested, high-status, highly paid positions, they rarely reach the top levels.

Relationship Between Sex and Other Stratification Systems

Once it is established that there is a sex stratification system, it is important to focus on the relationship between different stratification systems. Sex and social, racial, ethnic, and other systems undoubtedly overlap, but little theory or research has dealt with their interaction. When two or more systems overlap, does a high status in one system neutralize low status in another? Is high status in one area so important that the incumbent can enjoy a subordinate status in two or more systems? Does this entail a double- or triple-minority status for the incumbent because of compounded low status? These questions have important theoretical implications, since women occupy both dominant or subordinate positions in social, racial, ethnic, age, and other stratification systems.

There is some evidence that in societies with little social mobility, upper class and upper middle class women enjoy a dominant status despite their sex, and they tend to be free of the restrictions imposed on other women (Safilios-Rothschild, 1974). Class consciousness becomes so rigid that high social status overrides any other characteristics, including inferior sex or racial status. A study done in Brazil on class status found class to be more important than race (Runciman, 1972).

In some societies, the interaction of the age with the sex stratification system might enable older women to occupy a higher status than either younger men or women. This interaction is not, however, the same cross-culturally. For example, in Western societies such as the United States, in which a woman's life expectancy is quite high, higher than that of men, and in which there is no legitimate role for grandmothers, older women have a low status. In fact, older women tend to have a lower status than either older men or younger men and women. But in developing societies, in which a woman's life expectancy is low and grandmothers are valued and useful, old age defines a woman as "asexual" and brings considerable familial and sometimes also economic power (Safilios-Rothschild, 1977b; Bart, 1969).

Some authors recognize the important theoretical consequences of simultaneous stratification systems based on age, sex, class, and ethnicity. They realize that several status combinations can provide a powerful empirical clue to the nature of a society's overall stratification system, since it is possible to attribute causal weights to how each of these factors determines prestige, power, or income. Few researchers, however, have worked out the nature and effects of interactions for people occupying different statuses in different stratification systems (Lieberson, 1970).

Martin and Poston (1972) systematically examined occupational differentiation by sex and race in 66 standard metropolitan statistical areas in the United States in 1960. Occupational differentiation refers to the degree of dissimilarity in the occupational composition of white men and white women, white women and black men, and white men and black women. Unfortunately, when referring to occupational differentiation they failed to consider specific occupations, but instead looked at broad occupational categories. This shortcoming is extremely important because a high degree of sex differentiation exists in specific occupations within broad occupational categories. Whether the conclusions of this study were valid is questionable since occupational differentiation according to sex is so seriously underestimated. Thus, the finding that race is more powerful than sex in determining occupational composition except in the two youngest age groups cannot be accepted as valid. Their finding that occupational differentiation on the basis of both sex and race had higher values than either differentiation based on only sex or race might well hold, even after the occupational sex composition is examined within specific occupations (Martin & Poston, 1972).

Additional research on the interaction between sex and racial stratification systems is examined in chapter 8. It shows that sex discrimination generally is greater than racial discrimination and that class status is important in determining whether being black and a woman is a double penalty or an advantage.

Only one paper worked out the theoretical implications of overlapping membership (Hraba & Braito, 1974). The authors stated that it is problematic that people perceive their unequal life chances only in terms of their economic class, not as the Marxist model would have us believe. People might also attribute economic inequality to their race and sex, hypotheses largely ignored in the study of consciousness formation. Hraba and Braito argued that in contemporary America unequal life chances are structured along several statuses, and as a consequence there can be racial and sexual as well as economic inequality.

Which statuses people attribute their inequality to and which status they choose as relevant for their consciousness can vary according to different factors. The authors singled out "status incongruency," or "status inconsistency," as one of the most important factors. They proposed that people might attribute their economic inequality to their race or sex rather than to class in a status inconsistency represented by high-class qualifications (education) and low-class rewards (income). Hence, they argue that minorities, including women, might more often become conscious of their racial and sexual inequality than of class exploitation and attribute their lower opportunities to these statuses. They base this argument on the well documented fact that for blacks and women, achievement of qualifications (such as education) does not translate into the same economic, status, or power gains as it does for men in the same position (Blum & Duncan, 1967; Blum & Coleman, 1970; Harbeson, 1971; Epstein, 1973). These authors claim that parents who are blacks and/or women make their children more race or sex conscious than class conscious (Hraba & Braito, 1974).

The importance of racial and sexual consciousness is supported by the fact that these identities are formed comparatively early and can be at least as important, if not more so, for adolescents as class identities. A recent study of both black and white ninth grade students' self-placement found that sex was the second most salient social identity following age. Race was ranked seventh by black students and tenth by white students; class identity ranked lowest of all social identities, next to the last and last by both black and white students (Wellman, 1971). Thus, adolescents seem to be aware of their social identities; their racial and sexual identities are more important than their class identities; and their sexual identities are the most salient of all. Hraba and Braito (1974) stated that research studies in this area should focus on how people of different age groups compare their life chances with those of different racial, sexual, and class groups and what interest groups they are most likely to join to improve their circumstances. Such studies could help describe the interrelationships among different stratification systems as perceived by individuals.

At least one article dealing with age and social stratification concludes that the more intense the feelings of subordination due to racial, sexual, class, or ethnic discrimination, the less the generational differences and the greater the continuity of experience among different age groups (Laufer & Bengston, 1974). Recent evidence, according to these authors, indicates that a generation that responds simultaneously to class, racial, and sexual exploitation by necessity mutes the generational issues. Racial oppression and poverty are reexperienced by each generation. This element of generational continuity is too powerful for generational differentiation to overcome. The authors concluded that it is only among the white, upper middle class and upper income groups that subordination is largely a function of age, creating the possibility for unique age-based milieus. That is why the upper strata are most susceptible to generational discontinuity and its consequences (Laufer & Bengston, 1974).

Their conclusions probably hold true only for males, since even upper class white women in such developed societies such as the United States have experienced sex discrimination from generation to generation. This common experience of sex discrimination could override the experiences of age discrimination.

Height Stratification System: A New Dimension in the Status Profile

Clinical as well as empirical evidence shows that height could also affect stratification. This is important because, on the average, women are smaller than men, although height discrepancies exist between the sexes in different cultures, classes, and ethnic groups.

A clinical study by Harnett et al. (1974) consistently showed the importance of height. Both males and females maintained twice as much distance between themselves and a tall person than between themselves and a short person. The sex and height interaction was significant only at the 0.20 level, but because there were no references to the subjects about sex or attractiveness and because the object persons made no effort to be particularly appealing sexually, the sex variable was possibly attenuated.

These findings take on added importance when compared with clinical findings from other studies. At the behavioral level, obedience in subjects increases as the authority figure moves away from the subjects (Milgram, 1965); more agreeable responses were produced by subjects closer to the authority figure. In fact, Kleck (1970) argued that the extent to which the behavior of an individual is affected by another is a function of the distance between them. The closer the distance, the stronger the stimulus characteristics associated with others are perceived. Thus, at decreasing distances height will become an increasing factor in personal influence. This could explain why men, who are usually taller than women, have been able to influence and make women obey them, especially in close, interpersonal relationships.

Furthermore, empirical research from different areas of interpersonal relations and achievement demonstrated that height is an important stratification variable. Marriage data show that men normally marry women who are smaller than they so they can "look down upon" their wives. Women, on the other hand, must marry men who are somewhat taller so they can "look up to" their husbands. Therefore, short males and tall females have problems in courtship and in choosing a marital partner (Feldman, 1971).

This relationship between height and mate selection is indicative of the status of women in our society. Males are supposed to be more dominant and have more power than females, and one way for men to be dominant is to be taller.

Some professions, such as policeman and fireman, have explicit height regulations. These requirements are present although there is nothing inherent in the duties of either occupation that requires tall employees. These requirements suggest, therefore, discriminatory practices against small people. Feldman quoted two surveys. One, done at the University of Pittsburgh Business School, found that tall men (6 feet 2 inches and above) received a beginning salary 12.4 percent higher than graduates of the same school who were under 6 feet (Deck, 1971). Another study reported by the Wall Street Journal (November 25, 1969) indicated that shorter men might have more difficulty obtaining a job than tall men, since recruiters made a hypothetical choice that indicated an overwhelming preference in hiring a tall person over a short person, all other qualifications being equal. Similar height discrimination can be found in sports and in movies. In movies, short actors rarely play the romantic leads but often portray deviants who are either funny, bad, or tough. Feldman indicated that the media often make derogatory comments about a person who is short when evaluating his or her occupational or political performance. A social psychological experiment found that the higher the academic status attributed to a person, the taller the student subjects thought she or he was. Thus, status and height are highly correlated in the same way that being male is correlated with high status (Feldman, 1971).

This stratification system is important because it overlaps considerably with the sex stratification system. A double-minority status results from women's smaller size. The norms about how tall a woman must be to have high status might be different from those for men; thus a certain height for women could represent a low status for a man but an acceptably high status for women.

The existence of a height stratification system also raises the following research question: Have tall women experienced less legal, educational, and occupational discrimination than small women? Also, height stratification raises many other research questions about its effect in determining the status of women in different societies and at different times. Has it made any difference that women in a particular culture were, on the average, as tall as or taller than men? Did this help them achieve equality with men? Did their height allow them to participate in more powerful and prestigious activities and roles? Finally, regardless of the average height of women, has there been a historical relationship between height and the positions of power and prominence occupied by women?

Part VI.

Sex Role Stereotypes Die Hard

11. SEX ROLE STEREOTYPES: ARE THEY CHANGING AND HOW MUCH?

Journalists and social scientists alike are claiming that sex roles are changing and that sex role stereotypes influence and constrain people's lives less now than in the past. However, assessment of these changes is difficult because there are many dimensions involved in sex role stereotypes which have not been carefully delineated and studied. Furthermore, since these dimensions are not highly intercorrelated, changes occurring in one dimension do not necessarily imply changes in others.

The impetus for change is the Women's Liberation Movement and the resulting diffuse liberation ideology and variety of consciousness-raising experiences (rap groups, mass media programs, books, sex role classes, etc.). Although some stimuli are concrete, many changes have come about from less tangible events because the liberation ideology has by now become widespread and influenced people, even those who are not aware of it or are actually fighting against it. For some people, the first crack in sex role stereotypic beliefs came when talking with a more "liberated" friend or lover; for others, it came during a very traumatic divorce. It is, therefore, not so simple to decide when is "before" and when is "after" in assessing changes in sex role stereotypes. Furthermore, the changes are not uniform throughout the society. There are important differences between men and women, younger and older people, those living in small towns and those living in large cities, conservatives and liberals, authoritarian and nonauthoritarian people, and so on.

Operationalization of Sex Role Stereotypes

Sex role stereotypes include two large categories: (1) personality traits associated with and considered appropriate for men or for women; and (2) behaviors associated with and considered appropriate for men or for women.

While several researchers have operationalized sex role stereotypes as personality traits or behaviors, there has been less concern about identifying the different dimensions involved. A good example of the operationalization of sex role stereotypes as personality traits is the bipolar questionnaire developed by Rosenkrantz (1968) to elicit beliefs about traits associated with males and females. This questionnaire has been used in toto and in shortened or modified form by researchers such as Elman and associates (1970), Broverman et al. (1970), Huang (1971), and Vogel and associates (1974). To assess how important these traits are to self-definitions, Rosenkrantz (1968) also investigated which of these traits are incorporated into the self-concepts of male and female students. Similarly, Elman and associates (1970) examined real and ideal roles as well as self-concepts among college students in order to assess how closely the real self resembled the ideal self, the ideal sex role, and the stereotypic sex role.

Since the existing sex stratification system assigns higher value to "masculine" traits and behaviors, this positive evaluation and the corresponding devaluation of "feminine" traits and behaviors is a crucial dimension of sex role stereotypes. Many researchers did, in fact, study this dimension by asking students to evaluate the social desirability of traits deemed "masculine" or "feminine" (Rosenkrantz, 1968; Ross & Walters, 1973; Johnson, 1969; Turner & Turner, 1974). This dimension was somewhat differently operationalized by Morris (1974) and by Polk and Stein (1972), who examined beliefs about the advantages and disadvantages of being a man or a woman.

The latter type of approach has the methodological advantage of tapping people's sex role stereotypic beliefs more indirectly, and therefore it yields more reliable data. Furthermore, Komarovsky (1976) used elements from scales developed by Kammeyer (1964) and Johnson (1969) to tap "positive," "negative," and "neutral" sex role stereotypes about men and women.

Other researchers operationalized sex role stereotypes in terms of beliefs about sex-appropriate behaviors. Hawley (1972), for example, developed a questionnaire to assess beliefs about women's behaviors, characteristics, and rights which was also used by Kaplan and Goldman (1973).

As the Women's Movement made existing sex role ideologies more explicit, it became increasingly apparent that the labeling of a trait or behavior as "masculine" or "feminine" was the result of a particular type of sex role ideology. Thus, the study of sex role stereotypes and of the extent to which they were changing required studying the existence and evolution of sex role ideologies. Indeed, researchers started to operationalize sex role ideologies, which included sex role stereotypic beliefs as well as ideological and normative statements. Also, because the Women's Movement focused attention and concern on women's roles, most researchers devised scales and questionnaires to measure stereotypic beliefs about women's roles and sex role ideology as applied to women rather than men. Farrell (1974) formulated some items tapping attitudes toward men's traditional roles, expectations, and behaviors as well as toward men's liberation. Dijkers (1978) developed items measuring attitudes toward men's traditional roles and behaviors.

With regard to sex role ideology scales, Lipman-Blumen's (1972) scale, Osmond and Martin's (1975) scale, and the Meier (1971) Feminine Social Equality Scale are among the most widely used. Osmond and Martin's scale (1975) includes items measuring attitudes toward women's roles both within and outside the family, sex role stereotypes about characteristics and behaviors, as well as attitudes toward the content and the strategies of sex role changes.

Dimensions of Sex Role Stereotypes and Sex Role Ideology

Although not enough effort has been put into delineating the different dimensions of sex role stereotypes or ideology, there is considerable evidence that different dimensions do exist and that attitudes in one are not necessarily good predictors of attitudes in others (Safilios-Rothschild, 1971, 1972; Osmond & Martin, 1975). Osmond and Martin (1975) found, for example, that men who rejected most of the female stereotypic items and responded with a modern ideology regarding women's and men's familial roles as well as the content and strategies of sex role change could not fully accept women in professional work roles. In the latter area, they still had negative stereotypes about career women and women in high positions. Possibly, the full acceptance of these women is a separate cluster of attitudes which resist change because of the threatening consequence of sex equality: men will have to compete with high-achieving and competent women, and they will probably become subordinate to more successful women. This aspect of sex equality is threatening since it disrupts sex stratification in the workplace, which is probably the backbone of the sex stratification system.

In a 1970 survey, using a national probability sample of ever-married women under 45, Mason and Bumpass (1974) found two major clusters of intercorrelated items, a "core gender role ideology encompassing attitudes toward women's domestic and maternal role and a cluster of attitudes toward women's equal labor market rights." The items included in the "core gender role ideology" are: (1) the belief that women are happiest when at home (a rationalization about the nature of women); (2) the desirability of dividing labor between men and women; and (3) beliefs about possible emotional damage suffered by pre-school children of working mothers. The items under "equal labor market rights" include the beliefs about women's rights to the same job opportunities as men and to equal pay for equal work. (It is interesting to note that the "equal labor market rights" items are not intercorrelated enough to constitute a cluster when a nonwhite sample is used.) No items in these two clusters are correlated with other items dealing with maternity leave and childcare centers. Thus, the dimension of equal pay and work opportunities for women is not related to items referring to societal supports for working mothers, especially mothers with small children (Mason & Bumpass, 1974). It seems, therefore, that items referring to the conditions that make it possible for mothers of small children to work may constitute a different dimension, one that is resistant to change.

Type and Level of Measurement

The type and level of measurement of sex role stereotypes is becoming more important as more people become exposed to the liberation ideology, or at least to its rhetoric. This is particularly true for college-educated men and women who, even though they still have sex role stereotypes, do not like to appear "sexist." Although sexism has not yet taken on the connotation of immorality that racism has, it is not "fashionable" or "cool" to be sexist. Sexism does imply traditional, conservative values; for some people it also implies right-wing politics, which makes it socially unacceptable in many circles. Therefore, direct questions about sex role stereotypes or sex equality may indicate the subjects' sophistication, intelligence, and conservatism rather than their sex role beliefs, and therefore validly differentiate only those at the two extremes. At present, probably only observational techniques will yield reliable information.

However, probably up to the late 1960's or early 1970's, indirect questions and approaches may have yielded somewhat reliable data, depending upon the level of measurement. Global questions about women's rights or sex equality have rather consistently yielded positive responses from men, since it was easy to agree with egalitarian principles. However, when men were asked whether they would be willing to share responsibility for childcare so that their wives could pursue careers, or whether they would be threatened if their wives made more money than they did, they were more clearly differentiated as "sexist" or "nonsexist" (Steinman & Fox, 1966). These specific questions, which spell out how sex equality will affect men's lives and how they must redefine their own roles so that their wives can redefine theirs, often alienate men from the idea of liberation (Tavris, 1973). If these questions are not asked, many men who are not prepared to change their attitude toward the division of labor at home or to relinquish sexual control over women are found to be favorable to the Equal Rights Amendment (Osmond & Martin, 1975).

Furthermore, positive responses to nonstereotypic statements may sometimes mask stereotypic beliefs. For example, a man who responds "positively" to a hypothetical situation involving a female gas station attendant may do so because he is viewing her primarily as a sex object and finds the idea exciting, which is a stereotypic response. Also, a hypothetical situation that is unlikely to occur may elicit more egalitarian responses than a situation that is perceived as possible. For instance, when asked whether they would vote for a qualified woman for President, French men and women, who would see the situation as highly unlikely, may answer more affirmatively than American men and women, who would see the situation as more possible (Safilios-Rothschild, 1974; Virginia Slims American Women's Opinion Poll, 1972).

Researchers have tried to cope with these measurement problems by including different levels of measurement, that is, by trying to assess the extent to which men and women see themselves as sex typed as well as the extent to which they see most men (or the average man) and most females (or the average female) as sex typed (e.g., Lunneborg, 1970; Unger & Siiter, 1974). Others have assessed only the extent to which subjects project sex role stereotypes onto the average man and woman and examined the correlation between the subject's gender and the gender of the average person on whom they project these stereotypes (Kaplan & Goldman, 1973). Herman and Sedlacek (1973) used an adaptation of the Situational Attitude Scale to measure sexism instead of racism. The scale was adapted to compare men's attitudes toward women in nontraditional roles (such as police officer) with their attitudes toward men in the same roles, differences in the two sets of responses reflecting the respondents' sex role stereotypes. Through this technique, the social desirability of nonsexist answers may be avoided to some extent.

Observational studies of elementary and secondary teachers' classroom behaviors have showed significant discrepancies between sex role stereotyped beliefs reported by the teachers and their actual sex-differentiated behaviors (see chapter 6). These findings raise serious questions about how closely reported sex role stereotypic beliefs correspond to and predict actual behaviors, since many actors are not aware of the sex-typing and stereotyping influences on their behaviors.

What Sex Role Stereotypes and Ideologies Are Changing, How Much, and Among Whom?

Almost all of the "before and after" studies in this area were conducted among college students, and the conclusions cannot be generalized beyond this population, which is the most exposed to the "liberation" ideology. The nature and extent of change varies with the year in which the "after" study was carried out; the dimensions of sex role stereotypes or sex role ideology that the study was tapping; the gender of the respondents; the region of the country; and the sociopsychological characteristics of the respondents.

Studies carried out between 1960 and 1971 showed little change because it seems that the liberation ideology was not yet seriously accepted and its impact was not felt before 1972 or 1973. Neufeld et al. (1974), who replicated earlier studies in 1970, found, for example, that if there was any change, it was toward more sex role stereotyping among both men and women respondents. Physical attractiveness was still considered more important for women than for men, and physical feats and vocational success were considered more important for men. Other studies of college students in 1970 also showed that sex role stereotypes were projected on the average man or woman and that more desirable characteristics (such as perseverance, logical thinking, control of emotions) were attributed to men, while women were felt to have positive characteristics only in terms of sensitivity, concern for the welfare of others, and unselfishness (Ross & Walters, 1973; Kaplan & Goldman, 1973; Unger & Siiter, 1974).

Three studies comparing college students in 1973 or 1974 with students in the 1960's report significant changes in sex role ideology as reflected in work and marriage plans. Parelius (1974) used two independent random samples of women, one in 1969 and one in 1973, in a Midwestern women's college that was especially sensitive to the Women's Liberation Movement, offering various courses and activities related to women. She found that the women in 1973 were more strongly oriented toward work, more supportive of equal rights and duties for both sexes, and more expectant of help from husbands with housework and childcare, if not absolute equality in the division of labor in the home. A greater percentage of the women in the 1973 sample did not view motherhood and marriage as women's most important goals in life. However, as few women in 1973 as in 1969 were willing to forego marriage or motherhood in order to maximize occupational success. College women in 1973 wanted to combine work, marriage, and motherhood and perceived the three roles as compatible. This differs significantly from the earlier perceptions and realities of women who wanted a career; most of them had to forego marriage and/or motherhood or could not have a career unless they were divorced while still young (Rossi, 1974; Campbell & Soliman, 1967). Interestingly, this compatibility was reported even though there was very little change in women's perceptions of men's views. Women in both samples tended to view men as basically traditional in their sex role orientation, particularly on issues of marital and maternal roles for women. In fact, the 1973 sample saw men as somewhat more conservative than the 1969 sample; most women, whether traditional or feminist, believed that men wanted traditional wives. However, one direction of change among women who in 1973 identified themselves as feminists was that half of them believed men wanted to marry women who would contribute equally to the support of the family. Also, a few more feminists in 1973 than in 1969 thought that men would be willing to help with housework (Parelius, 1974).

Similar data were reported by Ahdab-Yehia (1975) from studies conducted in a Midwestern university in 1964 and 1974. Most of the women wanted to combine marriage, motherhood, and a career in 1974, whereas only a tiny percentage wanted to do the same in 1964. Men's attitudes had also changed significantly. In 1974, about 10 times more men than in 1964 expected their wives to work continuously throughout marriage. It is interesting, however, that most of these "liberated" men were either married men whose wives went to work or back to school after the children had grown up and who, therefore, could afford to be liberated, or upper middle class men who may have felt that the salaries of two professional people can buy high-quality childcare.

Orcutt and Inmon (1974) compared data collected in 1973 on a college population of males and females with data collected in 1961 on single female college students. The 1973 study replicated five items with high reliability (they formed a Guttman scale and had a coefficient of reproducibility of 0.93 in the first study and 0.86 in the second) from the 1961 study. Single females in 1973 were compared with those in 1961 to determine the degree of traditional or modern sex role orientation. The total proportion of "modern" females in 1973 exceeded that of the 1961 sample beyond the 0.001 level of statistical significance. (Both samples, however, were consistent in showing a tendency for college seniors to be somewhat more "modern" than women at the lower class levels.)

Although the Parelius (1974), Ahdab-Yehia (1975), and Orcutt and Inmon (1974) studies show significant changes in men's and women's sex role ideologies and life plans, we cannot conclude from these studies that men and women now have less stereotypic views of themselves and of each other. It is possible that despite all these reported changes, at least some men and women still believe that there are basic biological and psychological differences between the sexes, and we do not know how and under what conditions these beliefs affect their behaviors.

Data from Mason's (1973) non-college student sample also show that more women in 1973 than in 1970 agreed that women should have equal job opportunities with men and be considered equally for executive and political positions. Also, more women thought that a woman's job should be kept for her when she is having a baby and that men should help with housework. Moreover, fewer women in 1973 than in 1970 agreed with the sex differentiation of "breadwinning" and "household and childcare responsibilities." However, there were differences in sampling procedures; the 1973 sample included younger, better educated women than the 1970 sample. And since Glazer-Malbin (1974) found younger women to be less traditional than older women, it is difficult to assess the extent of the change or to be certain about what changes have occurred.

Men seem to be changing their attitudes more slowly than women, since only studies conducted in 1974, 1975, or later report significant changes in their willingness to redefine their own roles in order to allow women to redefine their roles. Komarovsky's data, collected in 1969-70, already showed some changes in that about half of the Ivy League men she studied would date a woman majoring in a "masculine" field and enjoyed the company of an intelligent woman. But very few (only 7 percent) were willing to modify their own roles to accommodate their wives' careers (Komarovsky, 1976). Some men were open to enjoying the "pleasant" aspects of women's liberation but were not willing to pay its cost. Orcutt and Inmon's 1973 data showed that women were more likely than men to have a modern view of the female sex role (the difference is significant at the 0.001 level) and that personal protest activity was significantly related to sex role orientation for both females and males, but particularly for females. Nine out of 10 high-protest women, compared with 6 out of 10 high-protest men, were "modern" in sex role orientation. Thus, we can detect a "chauvinism gap" even among high-protest men and women (Orcutt & Inmon, 1974). But in 1975, college men were found to be more open to compromise with their future wives or girlfriends on the lifestyle that they would follow, including egalitarian styles that would require significant redefinitions of roles (Cummings, 1977).

With regard to the sociopsychological characteristics that tend to be significantly related to nonstereotypic beliefs, behaviors, and sex role ideology, three different sets of variables seem to emerge. One set includes nonconformity, liberal social ideology, nonreligiousness, and social activism in general (beyond activism in the Women's Movement) (Orcutt & Inmon, 1974; Ellis & Bentler, 1973; Ferdinand, 1964; Bayer, 1975; Ball-Rokeach, 1976). Although this set of variables applies almost equally to men and women, it seems to be even more important for men. As long as nonsexist attitudes and behaviors are labeled "radical," or at least "liberal," and as going against the established power structure, such attitudes and behaviors are adopted in defiance of the sex stratification system and involve a partial rejection of "legitimate" status and power. For women, the trend toward normalization is greater, since adoption of a modern sex role ideology cuts across more different groups of women than of men. Nevertheless, the same factors differentiate among women, although their differentiating, power is weaker.

The second set of variables involves intelligence, self-esteem, self-confidence, high achievement, creativity, and a sense of competence (Komarovsky, 1976; Ellis & Bentler, 1973; Frieze, 1974; Bayer, 1975; Joesting & Joesting, 1973). This set of variables differentiates much better between sexist and nonsexist men than women, since men seem to need much more confidence in themselves and their abilities before they can accept women as equals and as competitors.

A third set of variables focuses on employment of the mother, especially a mother who is positive about her work, has successfully combined the maternal and work roles, or has a professional job (Hoffman, 1974; Lipman-Blumen, 1972). One small study found that women whose mothers had been employed while they were growing up perceived males as being more warm and expressive than those who had homemaking mothers (Vogel et al., 1974). This may be an effect of more role sharing by husbands whose wives work. Women whose mothers worked also tended to perceive women as being somewhat more competent and men as less competent than did women whose mothers were homemakers. On the other hand, men whose mothers were employed also perceived more warmth and expressiveness in men than those whose mothers were not employed. However, their mother's employment status did not change their view of women's competence. Both men and women who had working mothers saw their own sex as having positive characteristics traditionally associated with the opposite sex more than did children of homemakers (Vogel et al., 1974).

While overall the sociopsychological characteristics of nonsexist men and women tend to be increasingly normalized, there is also an opposite tendency toward polarization among both men and women. We could, therefore, expect that the above sets of variables will continue to differentiate between sexist and nonsexist people, although the degree of normalization will probably continue to be greater among college-educated people.

Potential Strains and Incongruities Between Men and Women

As sex role stereotypes and ideologies change at different rates for men and women, there will probably be some strains and incongruities in their perceptions of each other. There is evidence, for example, that women tend to perceive men as well as the larger society as more sex role stereotypic than do men. Women perceive men as viewing women in more stereotypic terms than males do in responses to questions about the average woman, and they perceive more dissimilarity between the average man's and average woman's traits than do men (Kaplan & Goldman, 1973). Also, women would ideally like men to be androgynous, whereas men would ideally like to be masculine and think that women want them to be so (Deutsch & Gilbert, 1976).

Furthermore, it has been found that each sex perceives the values of other young people of the same sex quite lucidly, but tends to misperceive the values of the opposite sex, even though the sex rankings of values by both sexes tend to be quite similar. Discrepancies were found between women's rankings of the traits they thought were valued by men and the rankings of these traits by the men themselves, and vice versa. The content of these discrepancies indicates that perceptions about values of the opposite sex tend to reflect popular notions about sex roles rather than reality, and therefore opposite-sex rankings by both males and females reflect stereotypic views. Males think females are more nurturant and concerned about interpersonal behavior than females think themselves to be, and females think males are more independent, ambitious, intellectual, and logical than males think themselves to be (Unger & Siiter, 1974).

Another type of perceptual incongruity indicates that men and women still do not feel very comfortable outside the security of traditional sex roles and do not know how they compare with the majority of people. Both college men and women tend to see the average man and the average woman in a more stereotyped way than they see themselves (Unger & Siiter, 1974; Lunneborg, 1970). An alternative explanation may, of course, be that they are more truthful about their sex role beliefs when they are not talking about themselves, but the earlier explanation may also be a tenable one.

A number of possible strains, real as well as hypothetical, emerge when these findings are juxtaposed against the earlier findings of reported changes in "before and after" studies among college students. How do women reconcile their conviction that work, marriage, and career are compatible and their desire to have all three with their perception that most men still want a traditional woman? How are men affected by the incongruities between men's and women's sex role perceptions? What is the nature of dynamics that determines the outcome of sex role negotiations in different types of man/woman relationships as well as the method for resolving incongruities? The available evidence does not allow us to deal with these questions at present.

References

1. Sex Role Socialization and the Sex Typing of Behaviors

Ainsworth, M.D.S. & Bell, S. M. 1970. Attachment, exploration, and separation: Illustrated by the behavior of one year-olds in a strange situation, *Child Development* 41:49-67.

Ainsworth, M. D. S., Bell, S. M., & Stayton, D. J. 1971. Individual differences in strange situation behavior of one year-olds. In *The Origins of Human Social Relations*. Edited by H. R. Schaffer, London: Academic Press, pp. 17-57.

Bandura, A. 1965. Influence of models' reinforcement contingencies on the acquisition of imitative responses, *Journal of Personality and Social Psychology* 1:589-595.

Bandura, A. & Kupers, C. J. 1964. Transmission of patterns of self-reinforcement through modeling, *Journal of Abnormal and Social Psychology* 69:1-9.

Bandura, A. & Mischel, W. 1965. Modification of self-imposed delay of reward through exposure to live and symbolic models, *Journal of Personality and Social Psychology* 2:698-705.

Bandura, A., Ross, D., & Ross, S. 1963a. Imitation of film-mediated aggressive models, *Journal of Abnormal and Social Psychology* 66:3-11.

Bandura, A., Ross, D., & Ross, S. 1963b. Vicarious reinforcement and imitative learning, *Journal of Abnormal and Social Psychology* 67:601-607.

Bandura, A. & Walters, R. 1963. *Social Learning and Personality Development*. New York: Holt, Rinehart and Winston, Inc.

Barclay, A. G. & Cusumano, D. 1967. Father-absence, cross-sex identity and field-dependent behavior in male adolescents, *Child Development* 38:243-250.

Barry, H., III, Bacon, M. K., & Child, I. I. 1957. A cross-cultural survey of some sex differences in socialization, *Journal of Abnormal and Social Psychology* 55:327-332.

Baumrind, D. & Black, A. E. 1967. Socialization practices associated with dimensions of competence in pre-school boys and girls, *Child Development* 38:291-328.

Bell, R. 1968. A reinterpretation of the direction of effects in studies in socialization, *Psychological Review* 75:81-95.

Bem, S. 1974. The measurement of psychological androgyny, *Journal of Consulting and Clinical Psychology* 42(2):162-185.

Bem, S. 1972. *Psychology Looks at Sex Roles: Where Have All the Androgynous People Gone?* Paper presented at the University of Southern California Symposium on Women, May.

Benedek, T. 1959. Parenthood as a developmental phase, *Journal of the American Psychoanalytic Association* 7:389-417.

Bigner, J. J. 1970. Fathering research and practice implications, *The Family Coordinator* 19:357-362.

Biller, H. B. 1970. Father absence and the personality development of the male child, *Developmental Psychology* 2(2):181-201.

Biller, H. B. 1969. Father absence, maternal encouragement and sex role development in kindergarten age boys, *Child Development* 40:539-546.

Biller, H. B. 1968. A multiaspect investigation of masculine development in kindergarten age boys, *Genetic Psychology Monographs* 76:89-139.

Biller, H. B. & Borstelmann, L. J. 1967. Masculine development: An integrative review, *Merrill-Palmer Quarterly* 13:253-294.

Biller, H. B. & Weiss, S. D. 1970. The father-daughter relationship and female personality development, Journal of Genetic Psychology, p. 114.

Blanchard, R. W. & Biller, H. B. 1971. Father availability and academic performance among third grade boys, Developmental Psychology 4:301-305.

Bragg, B. W. & Allen, V. L. 1970. Ordinal position and conformity: A role theory analysis, Sociometry 33(4):371-381.

Brenton, M. 1966. The American Male. New York: Coward-McCann.

Breyer, N. L. & May, J. G. Jr. 1970. Effect of sex and race of observer and model on imitation learning, Psychological Reports 27:639-646.

Brim, O. G., Jr. 1957. The parent-child relation as a social system: I. Parent and child roles, Child Development 28:343-364.

Brim, O. G. 1958. Family structure and sex role learning by children: A further analysis of Helen Koch's data, Sociometry 21:1-15.

Bronfenbrenner, U. 1961. The changing American child—A speculative analysis, Journal of Social Issues 17(1):6-18.

Bronson, W. C. 1971. Exploratory Behavior of 15 Month-Old Infants in a Novel Situation. Paper presented at the Society for Research in Child Development Meetings, Minneapolis, April.

Brooks, J. & Lewis, M. 1973. Attachment Behavior in Thirteen-Month-Old, Opposite Sex Twins. Paper presented at the Society for Research in Child Development Meetings, Philadelphia.

Brown, D. G. 1962. Sex role preference in young children: Methodological problems, Psychological Reports 11:477-478.

Brown, D. G. 1957. Masculinity-femininity development in children, Journal of Consulting Psychology 21:197-202.

Brown, D. G. 1956. Sex role preference in young children, Psychological Monographs 70(14) (whole no. 421).

Campbell, J. N. & Nadelman, L. 1972. Report No. 13, Developmental Program, Department of Psychology, University of Michigan. Unpublished manuscript.

Carlson, R. 1965. Stability and change in the adolescent's self-image, Child Development 36:659-666.

Clark, A. H. et al. 1969. Free-play in nursery school children, Journal of Child Psychology and Psychiatry and Allied Disciplines 10(3):205-216.

Coates, B., Anderson, F., & Hartup, W. W. 1972a. Interrelations in the attachment behavior of human infants, Developmental Psychology 6:218-230.

Coates, B., Anderson, E., & Hartup, W. W. 1972b. The stability of attachment behaviors in the human infant, Developmental Psychology 6:231-237.

Colley, T. 1959. The nature and origins of psychosexual identity, Psychological Review 66:165-177.

Coopersmith, S. 1967. The Antecedents of Self-Esteem. San Francisco: Freeman.

Cottrell, L. S., Jr. 1942. The analysis of situational fields in social psychology, American Sociological Review 7:370-382.

Crandall, V. J., Preston, A., & Rabson, A. 1960. Maternal reactions and the development of independence and achievement behavior in young children, Child Development 31:243-251.

D'Andrade, R. G. 1962. Father Absence and Cross-Sex Identification. Unpublished Ph. D. dissertation, Harvard University, Cambridge, Mass.

DeLucia, L. A. 1963. The toy preference test: A means of sex role identification, Child Development 34:107-117.

Dember, W. N. 1964. Birth order and need affiliation, Journal of Abnormal and Social Psychology 68:555-557.

Devereux, E. C., Jr., Bronfenbrenner, U., & Suci, G. J. 1962. Patterns of parental behavior in the United States of America and Federal Republic of Germany: A cross national comparison, International Social Science Journal 14(3):488-506.

Douvan, E. 1957. Character Processes in Adolescence. Paper presented at the American Psychological Association Annual Convention, New York, September.

Droppleman, L. F. & Schaefer, E. S. 1963. Boys' and girls' reports of maternal and paternal behavior, Journal of Abnormal and Social Psychology 67:648-654.

Dyk, R. & Witkin, H. 1965. Family experiences related to the development of differentiation in children, Child Development 36:21-56.

Eisenman, R. 1967. Birth-order and sex differences in aesthetic preference for complexity-simplicity, Journal of General Psychology 77:121-26.

Emmerich, W. 1962. Variations in the parent role as a function of the parents' sex and the child's sex and age, Merrill-Palmer Quarterly 8:3-11.

Emmerich, W. & Smoller, F. 1964. The role of patterning of parental norms, Sociometry 27:382-390.

Epstein, R. & Leverant, S. 1963. Verbal conditioning and sex role identification in children, Child Development 34:99-106.

Fagot, B. I. 1974. Sex differences in toddlers' behaviors and parental reaction, Developmental Psychology 1(4):554-558.

Fagot, B. I. 1968. Family interaction effects of masculinity-femininity, Journal of Personality and Social Psychology 8:117-120.

Firestone, S. 1970. The Dialectic of Sex. New York: Bantam Books.

Franck, K. & Rosen, E. 1949. A projective test of masculinity-femininity, Journal of Consulting Psychology 13:247-256.

Fryrear, J. & Thelen, M. H. 1969. Effect of sex of model and sex of observer on the imitation of affectionate behavior, Developmental Psychology 1:298.

Garrett, C. S. 1971. The Effects of Modeling on the Development of Sex Role Behavior in Children. Unpublished Ph. D. dissertation, Iowa State University, Ames.

Garrett, C. S., Cunningham, D. J., & Buelow, J. O. 1974. Effects of vicarious consequences and model and sex on imitative behavior in first grade children, Journal of Educational Psychology 66(6):940-947.

Gerard, H. B. & Rabbie, J. M. 1961. Journal of Abnormal and Social Psychology 62:586-592.

Goldberg, S. & Lewis, M. 1969. Play behavior in the year old infant: Early sex differences, Child Development 40:21-31.

Gough, H. 1952. Identifying psychological femininity, Educational Psychological Measurements 12:427-439.

Greenberg, S. B. & Peck, L. F. 1974. A Study of Pre-Schooler's Spontaneous Social Interaction Patterns in Three Settings: All Female, All Male, and Coed. Paper presented at the American Education Association, Chicago.

Greenstein, J. M. 1966. Father characteristics and sex typing, Journal of Personality and Social Psychology 3:271-277.

Grunebaum, M. G. et al. 1962. Fathers of sons with primary neurotic learning inhibition, American Journal of Orthopsychiatry 32:462-473.

Grusec, J. E. & Brinker, D. B., Jr. 1972. Reinforcement for imitation as a social learning determinant with implications for sex-role development, Journal of Personality and Social Psychology 21:149-158.

Guardo, C. J. & Bohan, J. B. 1971. Development of a sense of self-identity in children, Child Development 42:1909-1921.

Hall, M. & Keith, R. 1964. Sex role preference among children of upper and lower classes social class, Journal of Social Psychology 62:101-110.

Hartley, R. E. 1960. Children's concepts of male and female roles, Merrill-Palmer Quarterly 6:83-91.

Hartley, R. E. & Hardesty, F. P. 1964. Children's perceptions of sex roles in childhood, Journal of Genetic Psychology 104:43-51.

Hartley, R. E., Hardesty, F. P., & Gorfein, D. S. 1962. Children's perceptions and expressions of sex role preference, Child Development 33:221-227.

Hartup, W. W., Moore, S. G., & Sager, G. 1963. Avoidance of inappropriate sex typing by young children, Journal of Consulting Psychology 27:467-473.

Hartup, W. W. & Zook, E. A. 1960. Sex role preferences in three and four year old children, Journal of Consulting Psychology 24:420-426.

Hatfield, J. S., Ferguson, L. R., & Alpert, R. 1967. Mother-child interaction and the socialization process, Child Development 38:365-414.

Herzog, E. & Sudia, C. E. 1969. Family structure and composition: Research considerations. In Race, Research and Reason: Social Work Perspectives. New York: National Association of Social Workers, pp. 145-164.

Herzog, E. & Sudia, C. E. 1968. Fatherless homes: A review of the research, Children 15:177-182.

Hetherington, E. M. 1967. The effects of familial variables on sex typing on parent-child similarity, and on imitation in children. In Minnesota Symposia on Child Psychology. Edited by J. P. Hill, Minneapolis: The University of Minnesota Press, pp. 82-107.

Hetherington, E. M. 1965. A developmental study of the effects of sex by the dominant parent on sex role preference, identification, and imitation in children, Journal of Personality and Social Psychology 2:188-194.

Hetherington, E. M. & Frankie, G. 1967. Effects of parental dominance, warmth and conflict on imitation in children, Journal of Personality and Social Psychology 6:119-125.

Hicks, D. 1965. Imitation and retention of film-mediated aggressive peer and adult models, Journal of Personality and Social Psychology 2:97-100.

Hogan, R. A. 1957. Children's Sex Role Preference with the IT Figure (as quoted in Reed and Asbjornsen). Unpublished M.A. thesis, University of Denver.

Jacklin, C. N., Maccoby, E. E., & Dick, A. E. 1973. Barrier behavior and toy preference: Sex differences (and their absence) in the year old child, Child Development 44:196-200.

Juran, C. K. 1971. The Effects of Subject and Model Sex on Imitative Behavior with Sex-Typed Toys. Unpublished Ph. D. dissertation, University of Maryland, College Park.

Kagan, J. 1972. The emergence of sex differences, School Review 80(2):217-227.

Kagan, J. 1964. Acquisition and significance of sex typing and sex role identity. Review of Child Development Research. Edited by M. L. Hoffman & L. Hoffman, New York: Russell Sage Foundation.

Kagan, J. & Lewis, M. 1965. Studies of attention in the human infant, Merrill-Palmer Quarterly 11:95-127.

Kagan, J. & Moss, H. A. 1962. Birth to Maturity: A Study in Psychological Development. New York: John Wiley & Sons, Inc.

Katkovsky, W., Preston, A., & Crandall, V. J. 1964. Parent's achievement attitudes and their behavior with their children in achievement situations, Journal of Genetic Psychology 105:105-121.

Kleeman, S. 1971. The Influence of Adults on Sex Role Development of the Infant (as quoted in revision, 1972). Honors thesis, University of Chicago.

Koch, H. L. 1956. Sissiness and tomboyishness in relation to sibling characteristics, Journal of Genetic Psychology 88:231-244.

Kohlberg, L. 1966. A cognitive-developmental analysis of children's sex role concepts and attitudes. In The Development of Sex Differences. Edited by E. E. Maccoby, Stanford, Calif.: Stanford University Press, pp. 82-173.

Kohlberg, L. & Zigler, E. 1967. The impact of cognitive maturity on the development of sex role attitudes in the years four to eight, Genetic Psychology Monographs 75:89-165.

Landers, D. M. 1970. Sibling sex status and ordinal position effects of females sport participation and interests, Journal of Social Psychology 80:247-248.

Lansky, L. M. 1967. The family structure also affects the model: Sex role attitudes in parents of pre-school children, Merrill-Palmer Quarterly 13:139-150.

Lansky, L. M. 1964. The family structure also affects the model: Sex role identification in parents of pre-school children, Merrill-Palmer Quarterly 10:39-50.

Lansky, L. M., Crandall, V. J., Kagan, J., & Baker, C. T. 1961. Sex differences in aggression and its correlates in middle-class adolescents, Child Development 32:45:58.

Lansky, L. M. & McKay, G. 1963. Sex role preferences of kindergarten boys and girls: Some contradictory results, Psychological Reports 13:415-421.

Laosa, L. M. & Brophy, J. E. 1972. Effects of sex and birth order on sex role development and intelligence, Developmental Psychology 6(3):409-415.

Laosa, L. M. & Brophy, J. E. 1970. Sex and birth order interaction in measures of sex typing and affiliation in kindergarten children, Proceedings of the 78th Annual Convention of the American Psychological Association.

Lefkowitz, M. M. 1962. Some relationships between sex role preference of children and other-parent and child variables, Psychological Reports 10:43-53.

Levison, C. A. 1972. Sex Differentiation in Early Infancy: Problems in Methodology and Interpretation of Data. Paper presented at Midwestern Psychological Association Meeting, Cleveland, Ohio, May 4-6.

Lewis, M. 1972a. State as an infant-environment interaction: An analysis of mother-infant behavior as a function of sex, Merrill-Palmer Quarterly 18:95-121.

Lewis, M. 1972b. Parents and children: Sex role development, School Review 80:229-240.

Lewis, M. 1969. Infants' responses to facial stimuli during the first year of life, Developmental Psychology 1:95-121.

Lewis, M. & Freedle, R. 1972. Mother-infant dyad: The cradle of meaning, Research Bulletin, Princeton, N.J.: Educational Testing Service.

Lewis, M. & Weinraub, M. 1974. Sex of parent and sex of child: Socioemotional development. In Sex Differences in Behavior. Edited by R. C. Friedman, R. M. Richart, & R. L. Van de Wiele, New York: John Wiley & Sons.

Lewis, M. & Weinraub, M. 1973. Sex of Parent and Sex of Child: Socioemotional Development. Paper presented at the International Institute for the Study of Human Reproduction Conference on Sex Differences in Behavior, Tuxedo, N.Y., October.

Liebert, R., McCall, R., & Hanratty, M. 1971. Effects of sex-typed information on children's toy preferences, Journal of Genetic Psychology 119:733-736.

Lindesmith, A. R. & Strauss, A. L. 1968. Social Psychology, 3d ed, New York: Holt, Rinehart & Winston.

Lipman-Blumen, J. 1972. How ideology shapes women's lives, Scientific American 226(1):34-42.

Lynn, D. 1959. A note on sex differences in the development of masculine and feminine identification, Psychological Review 66:126-135.

Lynn, D. B. & Sawrey, W. L. 1962. Sex differences in the personality development of Norwegian children, Journal of Genetic Psychology 101:367-374.

Lynn, D. B. & Sawrey, W. J. 1959. The effects of father absence on Norwegian boys and girls, Journal of Abnormal and Social Psychology 59:258-262.

Maccoby, E. E. 1971. Sex Differences and Their Implications for Sex Roles. Paper presented at the American Psychological Association Annual Convention, Washington, D. C.

Maccoby, E. E. 1959. Role taking in childhood and its consequences for social learning, Child Development 30:239-252.

Maccoby, E. E. & Feldman, S. S. 1972. Mother attachment and stranger reactions in the third year of life, Monograph of the Society for Research in Child Development 37:1-86.

Maccoby, E. E. & Jacklin, C. N. 1974a. The Psychology of Sex Differences. Stanford, Calif.: Stanford University Press.

Maccoby, E. E. & Jacklin, C. N. 1974c. What we know and don't know about sex differences, Psychology Today, pp. 109-112.

Maccoby, E. E. & Jacklin, C. N. 1973. Stress, activity, and proximity seeking: Sex differences in the year old child, Child Development 44:34-42.

Maccoby, E. E. & Wilson, W. C. 1957. Identification and observational learning from films, Journal of Abnormal and Social Psychology 55:76-87.

MacDonald, A. P., Jr. 1969. Manifestations of differential levels of socialization by birth order, Developmental Psychology 1:485-492.

MacDonald, A. P., Jr. 1968. Anxiety Affiliation and Social Isolation: Manifestations of Differential Levels of Socialization by Birth Order. Unpublished Ph. D. dissertation, Cornell University, Ithaca, N.Y.

Madsen, C. 1968. Nurturance and modeling in pre-schoolers, Child Development 39:221-236.

McArthur, C. 1956. Personality of first and second children, Psychiatry 19:47-54.

McCandless, B. R. 1967. Children: Behavior and Development. New York: Holt, Rinehart & Winston.

McCord, J., McCord, W., & Thurber, E. 1962. Some effects of paternal absence on male children, Journal of Abnormal and Social Psychology 64:361-369.

McDavid, J. W. 1959. Imitative behavior in preschool children, Psychological Monographs 73:486.

McKay, G. H. 1964. Some Dimensions of Sex-Typing in Kindergarten Children: An Exploratory Study. Unpublished Ph. D. dissertation, Harvard University, Cambridge, Mass.

McKinney, J. P. 1968. The development of choice stability in children and adolescents, Journal of Genetic Psychology 113:79-83.

Mehta, P. H. & Juneja, S. 1969. Birth order, vocational preference and vocational expectation, Indian Journal of Psychology 46:57-70.

Messer, S. B. & Lewis, M. 1972. Social class and sex differences in the attachment and play behavior of the one year-old infant, Merrill-Palmer Quarterly 18:295-306.

Meyer, J. W. & Sobieszek, B. I. 1972. The effect of sex on adult interpretation of child behavior, Developmental Psychology 6:42-48.

Miller, B. 1961. Effects of Father Absence and Mother's Evaluation of Father on the Socialization of Adolescent Boys. Unpublished Ph. D. dissertation, Columbia University, New York.

Mischel, W. 1966. A social learning view of sex differences in behavior. In The Development of Sex Differences. Edited by E. E. Maccoby, Stanford, Calif.: Stanford University Press, pp. 56-81.

Mischel, W. & Liebert, R. M. 1966. Effects of discrepancies between observed and imposed reward criteria on their acquisition and transmission, Journal of Personality and Social Psychology 3:45-53.

Mitchell, D. & Wilson, W. 1967. Relationship of father absence to masculinity and popularity of delinquent boys, Psychological Reports 20:1173-1174.

Moss, H. A. 1967. Sex, age, and state as determinants of mother-infant interaction, Merrill-Palmer Quarterly 13:19-35.

Moss, H. A., Robson, K. S., & Pederson, F. 1969. Determinants of maternal stimulation of infants and consequences of treatment for later reactions to strangers, Developmental Psychology 1:239-246.

Murdoch, P. A. & Smith, G. F. 1969. Birth order and affiliation, British Journal of Social and Clinical Psychology 8:235-245.

Mussen, P. H. 1969. Early sex role development. In Handbook of Socialization: Theory and Research. Edited by D. A. Goshin, Chicago: Rand, McNally, Inc., pp. 707-731.

Mussen, P. & Distler, L. 1959. Masculinity identification and father-son relationships, Journal of Abnormal and Social Psychology 59:350-356.

Nadelman, L. 1973. Sex identity in American children: Memory, knowledge, and preference test. Report No. 32, Developmental Program, University of Michigan, Ann Arbor.

Nakamura, C. Y. & Rogers, M. M. 1969. Parents' expectations of autonomous behavior and children's autonomy, Developmental Psychology 1(5):613-617.

Nash, J. 1965. The father in contemporary culture and current psychological literature, Child Development 36:261-297.

Oetzel, R. M. 1966. Annotated bibliography. In The Development of Sex Differences. Edited by E. E. Maccoby, Stanford, Calif.: Stanford University Press.

Osofsky, J. & O'Connell, E. J. 1972. Parent-child interaction. Daughters effects upon mother's and father's behaviors, Developmental Psychology 7(2):157-168.

Pedersen, F. A. & Bell, R. Q. 1970. Sex differences in preschool children without histories of complications of pregnancy and delivery, Developmental Psychology 3:10-15.

Rabban, M. 1950. Sex role identification in young children in two diverse social groups, Genetic Psychology Monographs 42:81-158.

Radin, N. 1972. Father-child interaction and the intellectual functioning of four-year-old boys, Developmental Psychology 6(2):353-361.

Radin, N. 1969. Childrearing Antecedents of Cognitive Development in Lower Class Pre-School Children. Unpublished Ph. D. dissertation, University of Michigan, Ann Arbor.

Rebelsky, F. & Hanks, C. 1971. Fathers' verbal interaction with infants in the first three months of life, Child Development 42:63-68.

Reed, C. & Felker, D. W. 1974. Sex Differences in the Self Concept of Elementary School Children. Paper presented at the American Educational Research Association Annual Convention, Chicago.

Reed, M. R. & Asbjornsen, W. 1968. Experimental alteration of the IT scale in the study of sex role preference, Perceptual and Motor Skills 26:15-24.

Rheingold, H. L. & Eckerman, C. O. 1969. The infant's free entry into the new environment, Journal of Experimental Child Psychology 8:271-283.

Richards, M. P. & Bernal, J. F. 1972. Social interaction in the first days of life. In The Origins of Human Social Relations. Edited by H. R. Schaffer, New York: Academic Press.

Rosen, R. 1964. Social class and the child's perception of the parent, Child Development 34:1147-1153.

Rosenberg, B. G. & Sutton-Smith, B. 1971. Sex role identity and sibling composition, Journal of Genetic Psychology 118:29-32.

Rosenberg, B. G. & Sutton-Smith, B. 1968. Family interaction effects on masculinity-femininity, Journal of Personality and Social Psychology 8:117-120.

Rosenberg, B. G. & Sutton-Smith, B. 1966. Sibling associations, family size, and cognitive abilities, Journal of Genetic Psychology 107:271-279.

Rosenberg, B. G. & Sutton-Smith, B. 1964. The relationship of ordinal position and sibling sex status to cognitive abilities, Psychonomic Science 1:81-82.

Rosenblith, J. F. 1959. Learning by imitation in kindergarten children, Child Development 30:69-80.

Rosenfeld, H. M. 1966. Relationships of ordinal position to affiliation and achievement motives: Direction and generality, Journal of Personality 34:467-480.

Rothbart, M. K. & Maccoby, E. E. 1966. Parents' differential reactions to sons and daughters, Journal of Personality and Social Psychology 4:237-243.

Safilios-Rothschild, C., Polk, B., & Stein, R. 1975. Sex role socialization and sex differences. In Early Child Development. Edited by W. Fthenakis, Munich: Institute for Early Socialization.

Sampson, E. E. 1965. The study of ordinal position: Antecedents and outcomes, Progress in Experimental Personality Research 2:175-228.

Schachter, S. 1959. The Psychology of Affiliation. Stanford, Calif.: Stanford University Press.

Schell, R. E. & Silber, J. W. 1968. Sex role discrimination among young children, Perceptual and Motor Skills 27:379-389.

Schooler, C. 1964. Birth order and hospitalization for schizophrenia, Journal of Abnormal and Social Psychology 69:574-578.

Sears, R. R. 1970. Relation of early socialization experiences to self concepts and gender role in middle childhood, Child Development 4:267-289.

Sears, R., Maccoby, E. E., & Levin, H. 1957. Patterns of Child Rearing. Evanston, Ill.: Row, Peterson.

Sher, M. A. & Lansky, L. M. 1968. The IT scale for children. Effects of variations in the sex specificity of the IT figure, Merrill-Palmer Quarterly 14:323-330.

Sher, M. A. & Lansky, L. M. 1966. Sibling associations, family size and cognitive abilities, Journal of Genetic Psychology 107:271-279.

Skolnick, A. 1973. The Intimate Environment: Exploring Marriage and the Family. Boston: Little, Brown & Co.

Solomon, D. et al. 1973. Parent behavior and child academic achievement striving and related personality characteristics, Genetic Psychology Monographs 83:173-273.

Spelke, E., Zelazo, P., Kagan, J., & Kotelchuck, M. 1973. Father interaction and separation protest, Developmental Psychology 9:83-90.

Spence, J. T. et al. 1975. Ratings of self and peers on sex-role attributes and their relation to self-esteem and conceptions of masculinity and femininity, Journal of Personality and Social Psychology 32:29-39.

Spiro, M. E. 1958. Children of the Kibbutz. Cambridge, Mass.: Harvard University Press.

Stein, A. H. & Bailey, M. M. 1973. The socialization of achievement orientation in females, Psychological Bulletin 80:345-346.

Stein, A. & Smithells, J. 1969. Age and sex differences in children's sex role standards about achievement, Developmental Psychology 1:252-259.

Stevenson, H. W. 1961. Social reinforcement with children as a function of CA, sex of E, and sex of S, Journal of Abnormal and Social Psychology 67:147-154.

Stevenson, H. W., Keen, R. & Knights, R. M. 1963. Parents and strangers as reinforcing agents for children's performance, Journal of Abnormal and Social Psychology 67:183-186.

Sutton-Smith, B., Rosenberg, B. G., & Landay, F. 1968. Father absence, effects of families of different sibling. composition, Child Development 39:1213-1222.

Thompson, N. L., Jr. & McCandless, B. R. 1970. IT score variations by instruction style, Child Development 41:425-436.

Tiller, P. O. 1958. Father-absence and personality development of children in sailor families, Nordisk Psychologi's Monograph Series 9:1-48.

Torgoff, I. 1967. Parent's Differential Sex-Typing Control Attitudes and Family Structure. Paper presented at the Society of Study for Research in Child Development, New York.

Ward, W. D. 1968. Variance of sex role preference among boys and girls, Psychological Reports 23:467-470.

Warren, J. R. 1966. Birth order and social behavior, Psychological Bulletin 65:38-49.

Whiting, B. B., ed. 1963. Six Cultures: Studies of Child Rearing. New York: John Wiley & Sons.

Wiggins, R. G. 1961. Differences in self perceptions of ninth grade boys and girls, Adolescence 8(32):491-496.

Zimbardo, P. & Formica, R. 1963. Emotional comparison and self-esteem as determinants of affiliation, Journal of Personality 31:141-162.

Zucker, R. A., Manosevitz, M., & Lanyon, R. I. 1968. Birth order, anxiety and affiliation during a crisis, Journal of Personality and Social Psychology 8:354-359.

2. Same-Sex and Cross-Sex Influences on Sex Role Socialization

Abelson, R. P. & Lesser, G. 1958. The measurement of persuasibility in children. In Personality and Persuasibility. Edited by I. L. Janis et al., New Haven: Yale University Press.

Aries, E. 1974. Interaction Patterns and Themes of Male, Female and Mixed Groups. Paper presented at the American Psychological Association Annual Convention, New Orleans.

Bales, R. F. 1970. Personality and Interpersonal Behavior. New York: Holt, Rinehart & Winston.

Bayer, A. C. 1975. Sexist students in American colleges: A descriptive note, Journal of Marriage and the Family 37(2):391-397.

Bose, C. E. 1973. Jobs and Gender: Sex and Occupational Prestige. Baltimore, Md.: The Johns Hopkins University Center for Metropolitan Planning and Research.

Crandall, V. 1966. Personality characteristics and social and achievement behaviors associated with children's social desirability response tendencies, Journal of Personality and Social Psychology 41(5):477-486.

Damico, S. & Watson, K. 1974. Peer Helping Relationships: An Ecological Study of an Elementary Classroom. Paper presented at the American Educational Research Association Annual Convention, Chicago.

Davis, L. S. & Spiegler, M. D. 1974. Bright and Ambitious: Kiss of Death for Women. Paper presented at the American Psychological Association Annual Convention, New Orleans.

Eagly, A. H. 1969. Sex differences in the relation between self-esteem and susceptibility to social influence, Journal of Personality 37(4):581-591.

Entwisle, D. R. & Greenberger, E. 1972. Adolescents' views of women's work role, American Journal of Orthopsychiatry 42(4):648-656.

Greenberger, E. & Sorensen, A. 1970. Interpersonal choices among a junior high school faculty, Sociology of Education 44:198-216.

Guttentag, M. & Bray, M. 1976. Undoing Sex Stereotypes. New York: McGraw-Hill Book Co.

Harris, O. B. & Tseng, I. S. C. 1957. Children's attitudes toward peers and parents as revealed by sentence completion, Child Development 28:401-411.

Husbands, E. T. 1970. Some social and psychological consequences of the American dating system, Adolescence 5:451-462.

Janis, I. L. & Field, P. 1958. Sex differences and personality factors related to persuasibility. In Personality and Persuasibility. Edited by I. L. Janis et al., New Haven: Yale University Press.

Joffe, C. 1971. Sex role socialization and the nursery school: As the twig is bent. Journal of Marriage and the Family 33(3):467-475.

Komarovsky, M. 1973. Presidential address: Some problems in role analysis, American Sociological Review 38(6):649-662.

Lipman-Blumen, J. 1974. Changing Sex Roles in American Culture: Future Directions for Research. Washington, D.C.: National Institute of Education.

Maccoby, E. & Jacklin, C. 1974. Psychological Sex Differences and Their Implications. Unpublished paper, Stanford University, Stanford, Calif.:

Mehrabian, A. 1971. Seating arrangement and conversation, Sociometry 34(2):281-289.

Meyer, W. J. 1959. Relationships between social need strivings and the development of heterosexual affiliations, Journal of Abnormal and Social Psychology 59:51-57.

Miller, J. B. 1972. Sexual inequality: Men's dilemma, American Journal of Psychoanalysis 32(2):147-155.

Mulcahy, G. A. 1973. Sex differences in patterns of self-disclosure among adolescents: A developmental perspective, Journal of Youth and Adolescence 2(4):343-356.

Reese, H. W. 1966. Attitudes toward the opposite sex in late childhood, Merrill-Palmer Quarterly 12(2):157-163.

Reese, H. W. 1962. Sociometric choices of the same and opposite sex in late childhood, Merrill-Palmer Quarterly 8:173-174.

Rosen, B. C. & Aneshensel, C. S. 1976. The chameleon syndrome: A social psychological dimension of the female sex role, Journal of Marriage and the Family 38(3):605-617.

Rowe, G. P. 1968. Peer activities of preadolescents, Journal of Cooperative Extension 6(2):71-78.

Safilios-Rothschild, C. 1979. Second Nature: Socialization Is Destiny. Berkeley, Calif.: University of California Press.

Safilios-Rothschild, C. 1977. Love, Sex and Sex Roles. Englewood Cliffs, N.J.: Prentice-Hall.

Saltzstein, H. D. & Diamond, R. 1967. Transfer of social influence: Effect of peer's sex, Psychological Reports 20:343-350.

Schwartz, E. 1970. Sex Roles and Leadership Dynamics: A Study of Attitudes Towards the Female Sex Role. Senior honors thesis, University of Pennsylvania.

Stone, P. J. et al. 1966. The General Inquirer: A Computer Approach to Content Analysis. Cambridge, Mass.: The MIT Press.

Tulkin, S. R., Mulle, J. P., & Conn, L. K. 1969. Need for approval and popularity: Sex differences in elementary school students, Journal of Consulting and Clinical Psychology 38:35-39.

Whittaker, J. D. 1965. Sex differences and susceptibility to interpersonal persuasion, Journal of Social Psychology 66(1):91-94.

Whittaker, J. D. 1963. Parameters of Social Influence in the Autokinetic Situation. Unpublished study, North Dakota State University, Fargo.

Woelfel, J. 1972. Significant others and their role relationship to students in a high school population, Rural Sociology 37(1):97.

Wolman, C. & Frank, H. H. 1973. Gender deviancy in male peer groups. Proceedings of the 81st Annual Convention of the American Psychological Association 8:1063-1064.

3. Women's Achievement and Achievement Motivation

Alper, T. G. 1974. Achievement motivation in college women: A now-you-see-it-now-you-don't phenomenon, American Psychologist 29:194-203.

Alper, T. G., Leet, H., Bragg, E., & Eister, D. Z. 1972. The Effect of the Sex of the Stimulus-Cue Figures on the Achievement Fantasies of College Women. Unpublished paper, Wellesley College.

Anderson-Patty, R. 1974. The Arousal of the Motive to Avoid Success: An Extension and Test of the Theory. Paper presented at the Southeastern Psychological Association Annual Convention, Hollywood, Fla.

Anderson-Patty, R. & Shelley, H. P. 1974. Motive to Avoid Success: A Profile. Paper presented at the Southeastern Psychological Association Annual Convention, Hollywood, Fla.

Atkinson, J. W. 1964. An Introduction to Motivation. Princeton, N. J.: Van Nostrand.

Bar-tal, D. & Frieze, I. 1973. Achievement Motivation and Gender as Determinants of Attributions for Success and Failure. Unpublished paper, University of Pittsburgh.

Baumrind, D. 1971. Current patterns of parental authority, Developmental Psychology Monograph 5(1, pt. 2):1-103.

Baumrind, D. & Black, A. E. 1967. Socialization practices associated with dimensions of competence in preschool boys and girls, Child Development 38:291-327.

Berens, A. E. 1973. Sex-role stereotypes and the development of achievement motivation, Ontario Psychologist 5(2):30-35.

Berens, A. E. 1972. Socialization of need for achievement in boys and girls, Proceedings of the Annual Convention of the American Psychological Association 7(pt. 1):273-274.

Bieri, J. 1960. Parental identification, acceptance of authority and within-sex differences in cognitive behavior, Journal of Abnormal and Social Psychology 60:76-79.

Bing, E. 1963. Effect of childrearing practices on development of differential cognitive abilities, Child Development 34:631-648.

Breedlove, C. J. & Cicerelli, V. G. 1974. Women's fear of success in relation to personal characteristics and types of occupation, Journal of Psychology 86(2d half):181-190.

Brim, O. G., Jr. et al. 1969. American Beliefs and Attitudes About Intelligence. New York: Russell Sage Foundation.

Bronfenbrenner, U. 1961. The changing American child, Journal of Social Issues 17(1):6-8.

Broverman, I. K., Raymond, S., Broverman, D. M., & Clarkson, F. E. 1972. Sex-role stereotypes: A current appraisal, Journal of Social Issues 28:59-78.

Collard, E. D. 1964. Achievement Motive in the Four-Year-Old Child and Its Relationship to Achievement Expectancies of the Mother. Unpublished Ph. D. dissertation, University of Michigan, Ann Arbor.

Crandall, V. C. 1969. Sex differences in expectancy of intellectual and academic reinforcement. In Achievement-Related Motives in Children. Edited by C. P. Smith, New York: Russell Sage Foundation.

Crandall, V. C. 1964. Achievement behavior in young children, Young Children 20:77-90.

Crandall, V. C., Katkowsky, W., & Crandall, V. J. 1965. Children's belief in their own control of reinforcement in intellectual-academic achievement situations, Child Development, 36:91-109.

Crandall, V. J. 1963. Achievement. In Child Psychology: The 62nd Yearbook of the National Society for the Study of Education, Pt. I. Edited by H. W. Stevenson, Chicago: University of Chicago Press.

Crandall, V. J., Dewey, R., Katkowsky, W., & Preston, A. 1964. Parents' attitudes and behaviors and grade school children's academic achievements, Journal of Genetic Psychology 104:53-66.

Crandall, V. J. & Rabson, A. 1960. Children's repetition choices in an intellectual achievement situation following success and failure, Journal of Genetic Psychology 97:161-168.

Davis, L. & Spiegler, M. 1974. Bright and Ambitious: Kiss of Death for Women. Paper presented at the American Psychological Association Annual Convention, New Orleans.

Deaux, K. & Emswiller, T. 1975. Explanations of successful performance on sex-linked tasks: What's skill for the male is luck for the female, Journal of Personality and Social Psychology 29:80-85.

Deaux, K. & Taynor, J. 1973. Evaluation of male and female ability: Bias works both ways, Psychological Reports 32:261-262.

Dwyer, C. A. 1974. Children's Sex-Role Standards and Sex-Role Identification and Their Relationship to Achievement. Unpublished Ph. D. dissertation, University of California, Berkeley.

Feather, N. T. 1969. Attribution of responsibility and valence of success and failure in relation to initial confidence and perceived locus of control, Journal of Personality and Social Psychology 13:129-144.

Feather, N. T. & Raphelson, A. C. 1974. Fear of success in Australian and American student groups: Motive for sex-role stereotype, Journal of Personality 42(2):190-201.

Field, W. F. 1951. The Effects of Thematic Apperception upon Certain Experimentally Aroused Needs. Unpublished Ph. D. dissertation, University of Maryland, College Park.

Freeman, J. 1971. The social construction of the second sex. In Roles Women Play: Readings Toward Women's Liberation. Edited by M. H. Garskof, Belmont, Calif.: Brooks/Cole.

Frieze, I. H. 1975. Women's expectations for and causal attributions of success and failure. In Women and Achievement: Social Motivational Analyses. Edited by M. Mednick et al., New York: Halsted Press.

Frieze, I. 1973a. Studies of Information Processing and the Attributional Process in Achievement-Related Contexts. Unpublished Ph. D. dissertation, University of California at Los Angeles.

Frieze, I. 1973b. Sex Differences in Perceiving the Causes of Success and Failure. Unpublished paper, University of Pittsburgh.

Garai, J. & Schienfeld, M. 1968. Sex differences in mental and behavioral traits. Genetic Psychology Monographs 77:169-299.

Goldberg, L. R. 1968. Simple models or simple process?, American Psychologist 23:483-495.

Gray-Shellberg, L., Stone, S., & Villareal, S. 1972. A Comparison Across Time of the Double Standard in Career Conflict Situations. Paper presented at the University of California at Los Angeles Symposium on Sex Roles and Sex Differences.

Hatfield, J. S., Ferguson, L. R., & Alpert, R. 1967. Mother-child interaction and the socialization process, Child Development 38:365-414.

Hermans, M. J. M., Terlaak, J. A., & Maas, P. 1972. Achievement motivation and fear of failure in family and school, Developmental Psychology 6:520-528.

Hetherington, E. M. 1967. The effects of family variables on sex-typing, on parent-child similarity, and on imitation in children. In Minnesota Symposium on Child Psychology, vol. 1. Edited by J. P. Hill, Minneapolis: University of Minnesota Press.

Hoffman, L. R. & Maier, N. R. F. 1966. Social factors influencing problem solving in women, Journal of Personality and Social Psychology 4:382-390.

Hoffman, L. W. 1974. Effects of maternal employment on the child: A review of the research, Developmental Psychology 10(2):204-228.

Hoffman, L. W. 1972. Early childhood experiences and women's achievement motives, Journal of Social Issues 28(2):129-155.

Horner, M. 1972. Toward an understanding of achievement-related conflicts in women, Journal of Social Issues 28(2):157-175.

Horner, M. 1970. Femininity and successful achievement. A basic inconsistency. In Feminine Personality and Conflict. Edited by Bardwick, Douvan, Horner & Gutman, Belmont, Calif.: Brooks/Cole.

Horner, M. 1969. Women's will to fail, Psychology Today 3(6):41, 62.

Horner, M. 1968. Sex Differences in Achievement Motivation and Performance in Competitive and Non-Competitive Situations. Unpublished Ph. D. dissertation, University of Michigan, Ann Arbor.

Horner, M. & Rhoem, W. 1968. The Motive to Avoid Success and Changing Aspirations of College Women. Unpublished paper, University of Michigan, Ann Arbor.

Houts, P. S. & Entwisle, D. R. 1968. Academic achievement effort among females. Achievement attitudes and sex-role orientation, Journal of Consulting Psychology 15:284-286.

Jackaway, R. 1974. Sex differences in development of fear of success, Child Study Journal 4(2):71-79.

Jackaway, R., Steinberg C., & Teevan, R. 1972. Sex Differences in Fear of Success and the Relationship Between Fear of Success and Fear of Failure. Unpublished paper, State University of New York at Albany.

Kagan, J. 1964. Acquisition and significance of sex-typing and sex-role identity. In Review of Child Development Research, vol. 1. Edited by M. L. Hoffman & L. W. Hoffman, New York: Russell Sage Foundation.

Kagan, J. & Kogan, N. 1970. Individuality and cognitive performance. In Carmichael's Manual of Child Psychology, vol. 1. Edited by P. H. Mussen, New York: Wiley.

Kagan, J. & Moss, H. A. 1962. Birth to Maturity. New York: John Wiley & Sons.

Kammeyer, K. C. W., Miller S. J., & Mitchell, D. F. 1972. The Younger Minority Boy as a Clue to the Source of Achievement Orientation. Paper presented at the American Sociological Association Annual Convention, New Orleans.

Katz, M. 1974. Unpublished study cited by D. Tresemer. Fear of success: Popular but unproven, Psychology Today 7:82-85.

Kukla, A. 1972. Attributional determinants of achievement-related behavior, Journal of Personality and Social Psychology 21:166-174.

Lahtinen, P. 1964. The Effect of Failure and Rejection on Dependency. Unpublished Ph. D. dissertation, University of Michigan, Ann Arbor.

Lesser, G. S., Krawitz, R. N., & Packard, R. 1963. Experimental arousal of achievement motivation in adolescent girls, Journal of Abnormal Social Psychology 66(1):59-66.

Levine, A. & Crumrine, J. 1973. Women and the Fear of Success: A Problem in Replication. Paper presented at the American Sociological Association Annual Convention, New York.

Lipman-Blumen, J. 1973. The Vicarious Achievement Ethic and Non-Traditional Roles for Women. Paper presented at the Eastern Sociological Society Annual Convention, New York.

Lipman-Blumen, J. 1972. How ideology shapes women's lives, Scientific American 226(1):34-42.

Loughlin, L. J., O'Connor, H. A., Powell, M., & Parsley, K. M., Jr. 1965. An investigation of sex differences by intelligence, subject-matter area, grade and achievement level on three anxiety scales, Journal of Genetic Psychology 106(2):207-215.

Lubetkin, B. S. & Lubetkin, A. L. 1971. Achievement motivation in a competitive situation: The older female graduate student, Journal of Clinical Psychology 27(2):269-271.

Lunneborg, P. W. & Rosenwood, L. M. 1972. Need affiliation and achievement: Declining sex differences, Psychological Reports 31(3):795-798.

Makosky, V. P. 1972. Fear of Success, Sex Role Orientation of the Task, and Competitive Condition as Variables Affecting Woman's Performance in Achievement-Oriented Situations. Paper presented at the Midwestern Psychological Association Annual Convention.

McClelland, D. C., Atkinson, G. W., Clark, R. A., & Lowell, E. L. 1953. The Achievement Motive. New York: Appleton-Century-Crofts.

McDavid, J., Jr. 1959. Some relationships between social reinforcement and scholastic achievement, Journal of Consulting Psychology 23:151-154.

McMahon, I. D. 1972. Sex Differences in Expectancy of Success as a Function of Task. Paper presented at the Eastern Psychological Association Annual Convention, New York, April.

McMahon, I D. April 1971. Sex Differences in Causal Attributions Following Success and Failure. Paper presented at the Eastern Psychological Association Annual Convention, New York, April.

Miller, S. J. 1973. Parent-Child Relations and Women's Achievement Orientations. Paper presented at the 68th American Sociological Association Annual Convention, Washington, D.C.

Milton, G. A. 1959. Sex differences in problem solving as a function of role appropriateness of the problem contest, Psychological Reports 5:705-708.

Milton, G. A. 1957. The effects of sex-role identification upon problem solving skill, Journal of Abnormal and Social Psychology 55:208-212.

Monahan, L., Kuhn, D., & Shaver, P. 1974. Intrapsychic versus cultural explanations of the fear of success motive, Journal of Personality and Social Psychology 29(1):60-64.

Montanelli, D. S. & Hill, K. T. 1969. Children's achievement expectations and performance as a function of two consecutive reinforcements, Journal of Personality and Social Psychology 13:115-128.

Montemeyor, R. 1972. Children's Performance on and Attraction to an Activity as a Function of Masculine, Feminine or Neutral Labels and Sex-Role Preference. Paper presented at the Eastern Psychological Association Annual Convention, New York, April.

Moore, K. A. 1974. Fear of Success: The Distribution, Reliability, Antecedents, and Consequences of Motive to Avoid Success Imagery Among Females in a Metropolitan Survey Population. Paper presented at the American Sociological Association Annual Convention, Montreal.

Moss, M. A. 1967. Sex, age and state as determinants of mother-infant interaction, Merrill-Palmer Quarterly 13:19-35.

Oetzel, R. M. 1961. The Relationship Between Sex Role Acceptance and Cognitive Abilities. Unpublished M.A. thesis, Stanford University, Stanford, Calif.

Pheterson, G. I., Kiesler, S. B., & Goldberg, P. A. 1971. Evaluation of the performance of women as a function of their sex, achievement and personal history, Journal of Personality and Social Psychology 19:114-118.

Phillips, B. N. 1962. Sex, social class and anxiety as sources of variation in school achievement, Journal of Educational Psychology 53(6):316-322.

Plank, E. H. & Plank, R. 1954. Emotional components in arithmetic learning as seen through autobiographies. In The Psychoanalytic Study of the Child, vol. 9. Edited by R. S. Eissler et al., New York: International Universities Press.

Poloma, M. M. 1972. *Role conflict and the* married professional woman. In Toward a Sociology of Women. Edited by C. Safilios-Rothschild, Lexington, Mass.: Xerox College Publishing, pp. 187-198.

Prescott, D. 1971. Efficacy-related imagery, education and politics. Unpublished honors thesis, Harvard University.

Randall-Puryear, G. & Mednick, M. S. 1975. Black militancy, affective attachment, and the fear of success in black college women, Journal of Consulting and Clinical Psychology. In press.

Robbins, L. & Robbins, E. 1973. Comment on: Toward an understanding of achievement-related conflict in women, Journal of Social Issues 29(1):133-137.

Rosenthal, R. 1966. Experimenter Effects in Behavioral Research. New York: Appleton-Century-Crofts.

Rychman, R. M. & Sherman, M. F. 1973. Relationship between self esteem and internal-external control for men and women, Psychological Reports 32(3):1106.

Safilios-Rothschild, C., Polk, B., & Stein, R. 1975. Sex-role socialization and sex differences. A review chapter in Early Child Development. Edited by W. Fthenakis, Munich: Institute for Early Socialization.

Schwenn, M. 1970. Arousal of the Motive to Avoid Success. Unpublished junior honors thesis, Harvard University.

Small et al. 1973. Sex Differences in Children's Outer Directedness and Self Perceptions in a Problem Solving Situation. Unpublished paper, University of California at Los Angeles.

Spence, J. T. & Helmreich, R. 1972. The attitudes toward women scale: An objective instrument to measure attitudes toward the rights and roles of women in contemporary society, Catalog of Selected Documents in Psychology 2:66-67.

Stein, A. & Bailey, M. M. 1973. The socialization of achievement orientation in females, Psychological Bulletin 80(5):345-366.

Stein, A. H., Pohly, S. R., and E. Mueller. 1971. The influence of masculine, feminine and neutral tasks on children's achievement behavior, expectancies of success and attainment values, Child Development 42(1):195-207.

Stein, A. & Smithells, J. 1969. Age and sex differences in children's sex-role standards about achievement, Developmental Psychology 1(3):252-259.

Sutton-Smith, B., Crandall, V. J., & Roberts, J. M. 1964. Achievement and Strategic Competence. Paper presented at the Eastern Psychological Association Annual Convention, New York, April.

Thurber, S. 1972. Defensive externality and academic achievement by women, Psychological Reports 30(2):454.

Touliatos, J. & Lindholm, B. 1974. Correlates of Attitudes Toward the Female Sex Role and Achievement, Affiliation, and Power Motivation of College Women. Unpublished paper, Auburn University.

Tresemer, D. 1974. Fear of success: Popular but unproven, Psychology Today 8:82-85.

Tyler, F. B., Rafferty, J. E., & Tyler, B. B. 1962. Relationships among motivations of parents and their children, Journal of Genetic Psychology 101:69-81.

Vaughter, R., Gubernick, D., Matossian, J., & Haslett, B. 1974. Sex Differences in Academic Expectations and Achievement. Paper presented at the American Psychological Association Annual Convention, New Orleans.

Walberg, H. 1969. Physics, femininity and creativity, Developmental Psychology 1(1):47-54.

Walters, J. & Stennett, N. 1971. Parent-child relationships: A decade review of research, Journal of Marriage and the Family 33(1):70-111.

Watson, P. 1970. Individual differences in children's reactions to frustrative non-reward, Journal of Experimental Child Psychology 10(2):216-234.

Weiner, B. 1972. Theories of Motivation. Chicago: Markham Press.

Weiner, B. & Kukla, A. 1970. An attributional analysis of achievement motivation, Journal of Personality and Social Psychology 15:1-20.

Weiner, B. & Potepan, P. A. 1970. Personality correlates and affective reactions toward exams of succeeding and failing college students, Journal of Educational Psychology 61:144-151.

Weston, P. J. & Mednick, M. T. 1970. Race, social class and the motive to avoid success in women, Journal of Cross-Cultural Psychology 1(3):284-291.

Winchell, R. et al. 1974. Impact of co-education on "fear of success" imagery expressed by male and female high school students, Journal of Educational Psychology 66(5):726-730.

Wyer, R. S., Jr. 1967. Behavioral correlates of academic achievement: Conformity under achievement—and affiliation—incentive conditions, Journal of Personality and Social Psychology 6 (3):255-263.

Zander, A., Fuller, R., & Armstrong, W. 1972. Attributed pride and shame in group and self, Journal of Personality and Social Psychology 73:346-352.

Zunich, M. 1964. Children's reaction to failure, Journal of Genetic Psychology 104:19-24.

4. Women's Educational and Vocational Choices

Adamek, R. J. & Goudy, W. J. 1966. Identification, sex and change in college major, Sociology of Education 39(2):183-199.

Almquist, E. & Angrist, S. S. 1970. Career salience and atypicality of occupational choice among college women, Journal of Marriage and the Family 32(2):242-249.

Angrist, S. 1972. Changes in women's work aspirations during college (or work does not equal career), International Journal of Sociology of the Family 2(1):87-97.

Angrist, S. 1971. Measuring women's career commitment, Sociological Focus 2(3):29-34.

Astin, A. W. & Panos, R. J. 1969. The Educational and Vocational Development of College Students. Washington, D.C.: American Council on Education.

Bachtold, L. M. & Werner, E. E. 1971. Personality profiles of women psychologists: Three generations, Developmental Psychology 5(2):273-278.

Baird, L. 1973. The Graduates. Princeton, N.J.: Educational Testing Service.

Banducci, R. 1967. The effect of mother's employment on the achievement aspirations and expectations of the child, Personnel and Guidance Journal 46:263-267.

Barclay, L. K. 1974. The emergence of vocational expectations in pre-school children, Journal of Vocational Behavior 4:1-14.

Bardwick, J. M. 1971. Psychology of Women: A Study of Bio-Cultural Conflicts. New York: Harper & Row.

Barnett, R. C. 1973. The Relationship Between Occupational Prestige: A Study of Sex Differences and Age Trends. Paper presented at the American Psychological Association Annual Convention, Montreal, Canada, August.

Barnett, R. C. & Baruch, G. 1973. Occupational and Educational Aspirations and Expectations: A Review of Empirical Literature. Unpublished manuscript.

Baruch, G. K. 1972. Maternal influences upon college women's attitudes toward women and work, Developmental Psychology 6(1):32-37.

Baumrind, D. & Black, A. E. 1967. Socialization practices associated with dimensions of competence in pre-school boys and girls, Child Development 38:291-327.

Bayer, A. E. 1969. Marriage plans and educational aspirations, American Journal of Sociology 15:239-244.

Beuf, A. 1974. Doctor, lawyer, household drudge, Journal of Communications 24:142-145.

Carmody, J. F., Fenske, R. H., & Scott, C. S. 1972. Changes in Goals, Plans, and Background Characteristics of College-Bound High School Students. Report No. 52. Iowa City, Iowa: American College Testing Service.

Clark, E. T. 1967. Influence of sex and social class on occupational preference and perception, Personnel and Guidance Journal 45(5):440-444.

Clark, E. T. 1965. Status level of occupations chosen and rejected by middle and lower-class boys and girls, Psychological Reports 17(1):301-302.

Clark, E. T. & Misa, K. F. 1967. Peers' perceptions of Negro and white occupational preferences, Personnel and Guidance Journal 46:288-291.

Cummings, L. D. 1977. Opposition and Support for Alternative Types of Families: Feminism and Value Stretch Among College Men. Paper presented at the Eastern Sociological Association Meeting, New York.

David, D. 1971. Career Patterns and Values: A Study of Men and Women in Science and Engineering. New York: Columbia University, Bureau of Applied Social Research.

Davis, F. & Olesen, V. L. 1965. The career outlook of professionally educated women: The case of collegiate student nurses, Psychiatry, Journal for the Study of Interpersonal Processes 28(4):334-345.

Davis, J. A. 1971. Great Aspirations. Chicago: National Opinion Research Center.

DeFleur, M. L. 1963. Children's knowledge of occupational roles and prestige: Preliminary report, Psychological Reports 13:760-761.

Deutsch, M. 1960. Minority group and class status as related to social and personality factors in scholastic achievement, Monographs of the Society for Applied Anthropology, No. 2.

Dole, A. A. 1964. Sex as a factor in the determination of educational choice, Journal of General Psychology 71(2):267-278.

Edwards, C. N. 1969. Cultural values and role decisions: A study of educated women, Journal of Counseling Psychology 16(1):36-40.

Faunce, P. S. 1968. Personality characteristics and vocational interest related to the college persistence of academically gifted women, Journal of Counseling Psychology 15:31-40.

Fox, G. L. 1974. Some Observations and Data on the Availability of Same Sex Role Models as a Factor in Undergraduate Career Choice. Paper presented at the Society for the Study of Social Problems Annual Meetings, Canada.

Gump, J. P. & Rivers, L. W. 1973. The Consideration of Race in Efforts to End Sex Bias. Washington, D.C.: National Institute of Education.

Gysbers, N. C. et al. 1968. Characteristics of homemaker and career-oriented women, Journal of Counseling Psychology 15(6):541-546.

Hansen, J. C. & Caulfield, T. J. 1969. Parent-child occupational concepts, Elementary School Guidance and Counseling 3:269-275.

Hariton, E. B. & Singer, J. L. 1974. Women's fantasies during sexual intercourse: Normative and theoretical implications, Journal of Consulting and Clinical Psychology 42(3):313-322.

Harmon, L. W. 1972. Variables related to women's persistence in educational plans, Journal of Vocational Behavior 2(2):143-153.

Harmon, L. W. 1970. Anatomy of career commitment in women, Journal of Counseling Psychology 17(1):77-80.

Hawley, P. 1972. Perceptions of male models of femininity related to career choice, Journal of Counseling Psychology 19(4):308-313.

Helson, R. 1971. Women mathematicians and the creative personality, Journal of Consulting and Clinical Psychology 36(2):210-220.

Herman, M. H. & Sedlacek, W. E. 1974. Career Orientation of University and High School Women. Unpublished paper, Maryland University College Park Counseling Center.

Karman, F. J. 1973. Women: Personal and Environmental Factors in Role Identification and Career Choices. Los Angeles, Calif.: Center for the Study of Evaluation, University of California.

Kinnane, J. F. & Bannon, Sr. M. M. 1964. Perceived parental influence and work-value orientation, Personnel and Guidance Journal 43:273-279.

Kirchner, E. P. & Vondracek, S. I. 1973. What Do You Want To Be When You Grow Up?: Vocational Choice in Children Aged Three to Six. Paper presented at The Society for Research in Child Development Annual Convention, Philadelphia.

Kohlberg, L. 1966. A cognitive-developmental analysis of children's sex role concepts and attitudes. In The Development of Sex Differences. Edited by E. E. Maccoby, Stanford, Calif.: Stanford University Press.

Komarovsky, M. 1976. Dilemmas of Masculinity. New York: W. W. Norton & Co.

Lee, B. L. & King, P. 1964. Vocational choices of ninth grade girls and their parents' occupational levels, Vocational Guidance Quarterly 12:163-167.

Lefebvre, A. & Bohn, M. J. 1971. Occupational prestige as seen by disadvantaged black children, Developmental Psychology 4:173-177.

Leifer, A. D. & Lesser, G. S. 1975. Development of Career Awareness in Children. Cambridge, Mass.: Center for Research in Children's Television, Graduate School of Education, Harvard University.

Levine, A. G. 1968. Marital and Occupational Plans of Women in Professional Schools: Law, Medicine, Nursing, Teaching. Unpublished Ph. D. dissertation, Yale University, New Haven, Conn.

Lipman-Blumen, J. 1972. How ideology shapes women's lives, Scientific American 226(1):34-42.

Looft, W. R. 1971. Sex differences in the expression of vocational aspirations by elementary school children, Developmental Psychology 5(2):366.

Luria, Z. 1974. Recent women college graduates: A study of rising expectations, American Journal of Orthopsychiatry 44(3):312-326.

Mandle, J. D. 1975. Undergraduate activists in the Women's Movement and their public: Attitudes towards marriage and the family, Sociological Focus 8:257-269.

Mason, K. O. & Bumpass, L. L. 1975. U.S. women's sex-role ideology, 1970, American Journal of Sociology 80:1212-1219.

Matthews, E. & Tiedeman, D. V. 1964. Attitudes toward career and marriage and the development of life style in young women, Journal of Counseling Psychology 11:375-384.

McCandless, B. R. 1969. Problems of child rearing in a changing society, Family Coordinator 18:291-293.

McMillin, M. R. 1972. Attitudes of college men toward career involvement of married women, Vocational Guidance Quarterly 21(1):8-11.

McMillin, M. R. et al. 1971. Opinions on career involvement of married women, National Association of Women Deans and Counselors Journal 34(3):121-124.

Meyer, J. A. 1970. High school effects on college intentions, American Journal of Sociology 76:59-70.

Mischel, W. 1970. Sex-typing and socialization. In Carmichael's Manual of Child Psychology, vol. 2. Edited by P. H. Mussen, New York: John Wiley & Sons.

Morrill, W. H. C., Miller, D., & Thomas, L. 1970. Educational and vocational interests of college women, Vocational Guidance Quarterly 19:85-89.

Mulvey, M. C. 1963. Psychological and sociological factors in prediction of career patterns of women, Genetic Psychology Monographs 68(2):309-386.

Mussen, P. H. 1969. Early sex role development. In Handbook of Socialization: Theory and Research. Edited by D. A. Gosin, Rand McNally, Inc., pp. 707-731.

Nagely, D. L. 1971. Traditional and pioneer working mothers, Journal of Vocational Behavior 1(4):331-341.

Nelson, C. 1968. Changing roles of men and women: Illustrations from Egypt, Anthropological Quarterly 41(2):57-77.

Nelson, J. C. 1968. Interests of disadvantaged and advantaged Negro and white first graders, Journal of Negro Education 37:168-173.

O'Hara, R. P. 1962. The roots of careers, Elementary School Journal 62:277-280.

O'Leary, V. E. & Braun, J. S. 1972. Antecedents and Correlates of Professional Careerism Among Women. Unpublished manuscript, Oakland University, Rochester, Mich.

Parelius, A. P. 1975. Emerging sex role attitudes, expectations, and strains among college women, Journal of Marriage and the Family 37:146-153.

Rand, L. 1968. Masculinity or femininity? Differentiating career-oriented and homemaking-oriented college freshman women, Journal of Counseling Psychology 15(5, pt. 1):444-450.

Rey, L. D. 1974. Predicting Women's Educational Aspirations: The Influences of School, Family, and Sex Role Attitudes. Paper presented at the American Sociological Association Annual Convention, Montreal, Canada.

Rosen, B. & Aneshensel, C. S. 1976. The chameleon syndrome: A social psychological dimension of the female sex role, Journal of Marriage and the Family 38:605-617.

Rosen, R. A. H. 1973. Occupational Role Innovators and Sex Role Attitudes. Unpublished paper, Wayne State University, Detroit, Mich.

Rosenberg, M. 1957. Occupations and Values. Glencoe, Ill.: Free Press.

Rossi, A. S. 1970. Status of women in graduate departments of sociology 1968-1969, American Sociologist 5:1-12.

Rossi, A. S. 1967. Ambivalence in women: Should we plan for the real or the ideal? Adult Leadership 16:100-102, 118.

Rossi, A. S. 1965. Barriers to the career choice of engineering, medicine, and science among American women. In Women and the Scientific Professions. Edited by J. Mattfield & C. Van Ahen, Cambridge, Mass.: The MIT Press.

Safilios-Rothschild, C. et al. 1978. Sex role socialization and sex differences. In Early Child Development. Edited by W. Fthenakis, Munich: Institute for Early Socialization.

Schlossberg, N. K. & Goodman, J. 1972. Imperative for change: Counselor use of the strong vocational interest blanks, Impact 2(1):25-29.

Schmidt, J. L. & Rothney, J. W. M. 1955. Variability of vocational choices of high school students, Personnel and Guidance Journal 34:142-146.

Schwartz, J. J. 1969. Medicine as a vocational choice among undergraduate women, National Association of Women Deans and Counselors Journal 33(1):7-12.

Siegel, C. L. F. 1973. Sex differences in occupational choices of second graders, Journal of Vocational Behavior 3(1):15-19.

Simmons, D. D. 1962. Children's ranking of occupational prestige, Personnel and Guidance Journal 41:332-336.

Simmons, R. G. & Rosenberg, M. 1971. Functions of children's perceptions of the stratification system, American Sociological Review 36:235-249.

Stockard, J. 1977. The Influence of Family Background and Other Experiences on the Sex Role Related Attitudes of Male and Female Late Adolescents and Young Adults. Paper presented at the Annual Meetings of the American Sociological Association.

Tangri, S. S. 1972. Determinants of occupational role innovation among college women, Journal of Social Issues 28(2):177-199.

Tyler, L. 1964. Antecedents of two varieties of vocational interests, Genetic Psychology Monographs 70(2):177-227.

Vetter, L. & Lewis, E. C. 1964. Some correlates of homemaking versus career preference among college home economics students, Personnel and Guidance Journal 42(6):593-598.

Vogel, S. R. et al. 1975. Sex role self-concepts and life style plans of young women, Journal of Consulting and Clinical Psychology 43:427.

Werts, C. 1967. Career choice patterns, Sociology of Education 40(4):348-358.

Williams, T. H. 1972. Educational aspirations: Longitudinal evidence on their development in Canadian youth, Sociology of Education 45(2):107-133.

Wylie, R. C. 1963. Children's estimates of their schoolwork ability as a function of sex, race, and socioeconomic level, Journal of Personality 31:203-224.

Yoesting, D. R. & Bohlen, J. 1968. A longitudinal study of migration expectations and performances of young adults, Journal of Human Resources 3(4):485-498.

5. Sex Role Socialization Patterns in Selected Societies

Alzon, C. 1973. La Femme Potiche et la Femme Bonniche. Paris: Francois Maspero.

Barker, G. R. 1972. La femme en Union Sovietique, Sociologie et Societes 4(2):159-191.

Beech, M. H. 1972. Sex Role Development and Age Group Participation in Calcutta. Paper presented at the American Sociological Association Annual Convention, New Orleans.

Dahl, G. 1969. Barns Konsrollsuppfattning (Childrens' Comprehension of Sex Roles). Uppsala, Sweden: Uppsala University, research reports from the Department of Sociology.

Dodge, N. T. 1966. Women in the Soviet Economy. Baltimore, Md.: The Johns Hopkins University Press.

Linner, B. 1971. What does equality between the sexes imply?, American Journal of Orthopsychiatry 41:747-756.

Lipman-Blumen, J. 1973. Role dedifferentiation as a system response to crisis: Occupational and political roles of women, Sociological Inquiry 43(2):105-129.

Safilios-Rothschild, C. 1974. Women and Social Policy. Englewood Cliffs, N.J.: Prentice-Hall.

Safilios-Rothschild, C. 1972. Toward a Sociology of Women. Lexington, Mass.: Xerox College Publishing.

Safilios-Rothschild, C. 1971. A cross-cultural examination of women's marital, educational and occupational options, Acta Sociologica 14(1-2):96-113.

Safilios-Rothschild, C. 1969. Honor crimes in contemporary Greece, The British Journal of Sociology 20(2):205-218.

Sokolowska, M. 1965. Some reflections on the different attitudes of men and women toward work, International Labor Review 92:35-50.

Some Data on Sex Role Socialization in Sweden. 1975. Mimeographed.

Sullerot, E. 1971. Woman, Society, and Change. New York: McGraw-Hill Book Co.

Women in Sweden in the Light of Statistics. 1971. Stockholm: The Joint Female Labor Council.

6. Sex Discrimination in Primary, Secondary, and Higher Education

Adelman, H. S. 1969. Reinforcement effects of adult nonreaction on expectancy of underachieving boys, Child Development 40:111-122.

Anastasiow, N. 1965. Success in school and boys' sex role patterns, Child Development 36:1053-1066.

Asher, S. & Gottman, J. 1972. Sex of Teacher and Student Teaching Achievement. Paper presented at the American Educational Research Association Annual Convention, Chicago, Ill.

Bandura, A., Lipsher, D., & Miller, P. 1969. Psychotherapists' approach-avoidance reactions to patients' expressions of hostility, Journal of Consulting Psychology 24:1-8.

Beckman, L. 1970. Effects of students' performance on leaders' and observers' attributions of causality, Journal of Educational Psychology 61:76-82.

Berlin, I. 1969. A Psychiatric View of Learning Disorders. Proceedings of 61st Ross Conference on Pediatric Research-Learning Disorders in Children. Columbus, Ohio: Ross Laboratories.

Bernard, J. 1964. *Academic Women.* University Park: Pennsylvania State University Press.

Biber, H., Miller, L. B., & Dyer, J. L. 1972. Feminization in pre-school, *Developmental Psychology* 7(1):86.

Biedenkapp, M. & Goering, J. 1971. How 'masculine' are male elementary teachers? *Phi Delta Kappan* 53:115.

Blackwell, G. W. 1963. The college and the continuing education of women, *Educational Record* 44:33-39.

Blanchard, R. W. & Biller, H. B. 1971. Father availability and academic performance among third-grade boys, *Developmental Psychology* 4:301-305.

Bloom, B. S. 1971. Mastery learning. In *Mastery Learning.* Edited by J. H. Block, New York: Holt, Rinehart & Winston.

Brophy, J. & Good, T. 1970. Teachers' communication of differential expectations for children's classroom performance: Some behavioral data, *Journal of Educational Psychology* 61:365-374.

Brophy, J. & Laosa, L. 1971. Effect of a male teacher on the sex-typing of kindergarten children, *Proceedings of the 79th Annual Convention of the American Psychological Association* 6:169-170.

Bunting, J. W. 1961. The relation of business to women's higher education, *Educational Record* 42:286-95.

Bunting, M., Graham, P. A., & Wasserman, E. 1970. Academic freedom and incentive for women, *Educational Record* 51:386-391.

Campbell, M. A. 1973. *Why Would a Girl Go Into Medicine? Medical Education in the U.S.: A Guide for Women.* Privately printed.

Caplan, P. J. 1974. *Sex and Other Factors as Determinants of Report of Learning Problems.* Paper presented at the American Psychological Association Annual Convention, New Orleans.

Caplan, P. J. & Kinsbourne, M. 1974. Sex differences in response to school failure, *Journal of Learning Disabilities* 7(4):49-52.

Carter, R. 1952. How invalid are marks assigned by teachers? *Journal of Educational Psychology,* April, pp. 218-228.

Chafetz, J. S. 1974. *Masculine, Feminine, or Human?* Itasca, Ill.: F. E. Peacock Publishers.

Chasen, B. 1974. Sex role stereotyping and prekindergarten teachers, *Elementary School Journal* 74(4):220-235.

Clapp, R. 1967. *The Relationship of Teacher Sex to Fifth Grade Boys' Achievement Gains and Attitudes Toward School.* Unpublished doctoral dissertation, Stanford University.

Cless, E. 1969. A modest proposal for the educating of women, *American Scholar* 38:618-627.

Cody, W. 1966. Control and resistance in a slum school, *Elementary School Journal* 67:1-7.

Cross, K. P. 1971. *The Undergraduate Woman.* Research Report No. 5. Washington, D.C.: American Association for Higher Education.

DeCrow, K. 1972. Look, Jane, look! See Dick run and jump! Admire him! In *Sex Differences and Discrimination in Education.* Edited by S. Anderson, Worthington, Ohio: Charles A. Jones Publishing Co.

DeGroat, A. & Thompson, G. 1949. A study of the distribution of teacher approval and disapproval among sixth grade pupils, *Journal of Experimental Education* 18:57-75.

Deutsch, M. & Brown, B. 1964. Social influence in Negro-white intelligence differences, *Journal of Social Issues* 20:24-35.

Doherty, E. G. & Culver, C. 1976. Sex-role identification, ability, and achievement among high school girls, *Sociology of Education* 49:1-3.

Donlon, T. F. 1971. *Content Factors in Sex Differences on Test Questions.* Paper presented at the New England Educational Research Organization Annual Meeting, Boston.

Ekstrom, R. B. 1972. *Barriers to Women's Participation in Post-Secondary Education. A Review of the Literature.* Research Bulletin 72-49. Princeton, N.J.: Educational Testing Service.

Ellis, J. R. & Peterson, J. L. 1971. Effects of same sex class organization on junior high school students' academic achievement self-discipline, self-concept, sex role identification and attitude toward school, *Journal of Educational Research* 64:455-464.

Ewald, L. S. 1971. Sex discrimination in higher education: Constitutional equality for women? Journal of Family Law 10(3):327-343.

Feldman, S. D. 1973. Impediment or stimulant? Marital status and graduate education, American Journal of Sociology 78:982-994.

Felsenthal, H. 1970. Sex Differences in Expressive Thought of Gifted Children in the Classroom. American Educational Research Association, ERIC. Ed. 039-106.

Ferguson, L. R. & Maccoby, E. E. 1966. Interpersonal correlates of differential abilities, Child Development 37:549-572.

Feshbach, N. D. 1969. Student teacher preferences of elementary school pupils varying in personality characteristics, Journal of Educational Psychology 60:126-132.

Finn, J. D. 1972. Expectations and the educational environment, Review of Educational Research 42:387-410.

Fisher, J. K. & Waetjen, W. B. 1966. An investigation of the relationship between the separation by sex of eighth grade boys and girls and English achievement and self-concept, Journal of Educational Research 59(9):409-412.

Flanagan, J. C. 1966. Quality education for girls, Women's Education 5(4):1-7.

Forslund, M. A. & Hull, R. E. 1972. Sex-role identification and achievement at preadolescence, The Rocky Mountain Social Science Journal 9(1):105-110.

Fox, G. L. 1974. Some Observations and Data on the Availability of Same Sex Role Models as a Factor in Undergraduate Career Choice. Paper presented at the Society for the Study of Social Problems Annual Meetings, Canada.

Frasher, R. & Walker, A. 1972. Sex roles in early reading text books, Reading Teacher 25(8):741-749.

Gamsky, N. & Farwell, G. 1966. Counselor behavior as a function of client hostility, Journal of Counseling Psychology 13:184-190.

Gates, A. I. 1961. Sex differences in reading ability, The Elementary School Journal 61:431-434.

Good, T. & Grouwns, D. 1972. Reaction of Male and Female Teacher Trainees to Descriptions of Elementary School Pupils. Technical Report No. 62, Center for Research in Social Behavior, University of Missouri at Columbia.

Good, T., Sikes, J., & Brophy, J. 1973. Effects of teacher sex and student sex on classroom interaction, Journal of Educational Psychology 65(1):74-87.

Goodwin, G. G. 1966. The Woman Doctoral Recipient. Unpublished doctoral dissertation, Oklahoma State University.

Gordon, I. J. 1966. The assessment of classroom emotional climates by means of the observation schedule and record, Journal of Teacher Education 17:224-232.

Graebner, D. B. 1972. A decade of sexism in readers, The Reading Teacher, October, vol. 26.

Grambs, J. D. 1972. Sex-stereotypes in instructional materials, literature, and language: A survey of research, Women Studies Abstracts 1:1-4, 91-94.

Grambs, J. D. & Waetjen, W. B. 1966. Being equally different: A new right for boys and girls, The National Elementary Principal 46:59-67.

Guttentag, M. & Bray, M. 1976. Undoing Sex Stereotypes, New York: McGraw-Hill.

Harris, A. S. 1970. The second sex in academe, American Association of University Professors Bulletin 56:283-295.

Harvey, O. J. et al. 1968. Teachers' beliefs, classroom atmosphere and student behavior, American Educational Research Journal 5:151-166.

Haven, E. W. & Horch, D. H. 1972. How College Students Finance Their Education. New York: College Entrance Examination Board.

Heller, K., Myers, R., & Kline, L. 1963. Interviewer behavior as a function of standardized client roles, Journal of Consulting Psychology 27:117-122.

Hembrough, B. L. 1966. A two-fold educational challenge: The student wife and the mature woman student, Journal of the Association of Women Deans and Counselors 29:163-167, summer.

Hetherington, E. M. & Deur, J. L. 1971. The effects of father absence on child development, *Young Children* 26(4):233-248.

Heyns, B. 1972. Down up the staircase: Sex roles, professionalization, and the status of teachers. In *Sex Differences and Discrimination in Education*. Edited by S. B. Anderson, Worthington, Ohio: Charles A. Jones Publishing Co.

Holmstrom, E. I. & Holmstrom, R. W. 1974. The plight of the woman doctoral student, *American Educational Research Journal* 11(1):1-17.

Hunter, T. 1967. The status of women in Australia, *Indian Journal of Social Work* 28(2):161-167.

Hurley, J. F. 1965. *Report of Project Evaluations: A Study of All-Boy and All-Girl Groups at the Third and Fifth Grade Levels and an Evaluation After Two Years in Same Sex Classes*. Fairfax, Va.: Office of Psychological Services, Fairfax County School Board.

Hurley, J. F. 1964. *Report of Project Evaluations: Instructional Grouping by Sex at the Fifth Grade Level—A Study of All-Boy and All-Girl Groups*. Fairfax, Va.: Office of Psychological Services, Fairfax County School Board.

Husbands, S. 1972. Women's place in higher education, *School Review* 80:261-274.

Jacklin, C. N. & Mischel, H. N. 1973. As the twig is bent—Sex role stereotyping in early readers, *School Psychology Digest* 2(3):30-38.

Jackson, P. & Lahaderne, H. 1967. Inequalities of teacher-pupil contacts, *Psychology in the Schools*, 4:204-211.

Jackson, P. & Lahaderne, H. 1971. Inequalities of teacher-pupil contacts. In *The Experience of Schooling*. Edited by M. Silberman, New York: Holt, Rinehart, and Winston.

Jencks, C. & Riesman, D. 1968. *The Academic Revolution*. Garden City: Doubleday & Co.

Johnstone, J. & Rivera, R. 1965. *Volunteers for Learning*. Chicago: Aldine.

Kayden, X. 1970. *Report on Women in Continuing Education*. Washington, D.C.: U.S. Office of Education.

Kernkamp, E. & Price, E. 1972. Co-education may be a "no-no" for the six year old boy, *Phi Delta Kappan* 53:662-663.

Kinsbourne, M. 1969. Neuropsychological and neurophysiological aspects of learning disorders, *Proceedings of 61st Ross Conference on Pediatric Research—Learning Disorders in Children*. Columbus, Ohio: Ross Laboratories.

Klein, S. 1971. Student influence on teacher behavior, *American Educational Research Journal* 8:403-421.

Lahaderne, H. M. 1967. *Adaption to School Settings: A Study of Childrens' Attitudes and Classroom Behavior*. Office of Education Final Report, ED 012943.

Lahaderne, H. & Cohen, S. 1972. *Freedom and Fairness: A Comparison of Male and Female Teachers in Elementary Classrooms*. Paper presented at the American Educational Research Association Annual Convention, Chicago.

Lee, P. C. 1973. The early classroom experience: Masculine or feminine?, *Perspectives on Education* 6:10-15.

Lee, P. C. & Wolinsky, A. L. 1973. Male teachers of young children: A preliminary empirical study, *Young Children* 28:342-352.

Lester, E. P., Dudek, S., & Muir, R. C. 1972. Sex differences in the performance of school children, *Canadian Psychiatric Association Journal* 17:273-278.

Levy, B. & Stacey, J. 1973. Sexism in the elementary school: A backward and forward look, *Phi Delta Kappan* 55:105-109.

Lippitt, R. & Gold, M. 1959. Classroom social structure as a mental health problem, *Journal of Social Issues* 15(1):40-49.

Locksley, A. 1974. *Toward Unsexing Stereotyping of the High School Environment*. Paper presented at the American Psychological Association Annual Convention, New Orleans.

Lord, M. E. M. 1968. *Mature Women and the Degree of Doctor of Philosophy*. Unpublished doctoral dissertation, University of Wisconsin, Madison.

Loughlin, L. J., O'Connor, M. A., Powell, M., & Parsley, K. M., Jr. 1965. An investigation of sex differences by intelligence, subject-matter area, grade, and achievement level on three anxiety scales, Journal of Genetic Psychology 106:207-215.

Ludeman, W. W. 1961. Declining female college attendance: Causes and implications, Educational Forum 25:505-507.

Lyon, R. 1964. Married women and the academic tradition, Journal of Higher Education 35:251-255.

Maccoby, E., ed. 1966. The Development of Sex Differences. Stanford, Calif.: Stanford University Press.

Maccoby, E. E. & Jacklin, C. N. 1974. The Psychology of Sex Differences. Stanford, Calif.: Stanford University Press.

Maccoby, E. & Jacklin, C. 1971. Sex Differences and Their Implications for Sex Roles. Paper presented at the American Psychological Association Annual Convention, Washington, D.C.

Madsen, C. 1968. Nurturance and modeling in pre-schoolers, Child Development 39:221-236.

Magarrell, M. 1978. Women account for 93 percent of enrollment gain, Chronicle of Higher Education 15:1.

Martin, R. 1972. Student sex and behavior as determinants of the type and frequency of teacher-student contacts, Journal of School Psychology 10:339-347.

McBee, L. & Suddick, D. 1974. Differential freshman admission by sex, National Association for Women Deans, Administrators and Counselors Journal 37(2):75-77.

McCracken, J. H. 1973. Sex typing of reading by boys attending all male classes, Developmental Psychology 8:148.

McFarland, W. J. 1969. Are girls really smarter? Elementary School Journal 70(1):14-19.

McNeil, J. D. 1964. Programmed instruction versus usual classroom procedures in teaching boys to read, American Educational Research Journal 1:113-119.

Meyer, J. W. & Sobieszek, B. I. 1972. The effect of sex on adult interpretation of child behavior, Developmental Psychology 6:42-48.

Meyer, W. & Lindstrom, D. 1969. The Distribution of Teacher Approval and Disapproval of Head Start Children. Report to the Office of Economic Opportunity.

Meyer, W. J. & Thompson, G. G. 1956. Teacher interaction with boys as contrasted with girls. In Sex differences in the distribution of teacher approval and disapproval among sixth grade children, Journal of Educational Psychology 47:385-397.

Morrison, V. B. 1965. Teacher-Pupil Interaction in Elementary Urban Schools. Office of Education Final Report, ED 003385.

Myers, C. A. 1964. Special problems encountered by mature women undergraduates, Journal of the National Association of Women Deans and Counselors 24:137-139.

Oltman, R. M. 1971. Campus 1970: Where Do We Stand? Washington: AAUP.

Palardy, M. 1969. What teachers believe, what children achieve, Elementary School Journal 69:370-374.

Peltier, G. 1968. Sex differences in the school. Problem and proposed solution, Phi Delta Kappan 50:350-354.

Phelps, M. O. 1972. Does sex make a difference?, College and University 48:90-91.

Portuges, S. M. & Feshbach, N. D. The influence of sex and socioethnic factors upon imitation of teachers by elementary school children, Child Development 43(4):981-989.

Pullen, D. L. 1970. The educational establishment: Wasted women. In Voices of the New Feminism. Edited by M. L. Thompson, Boston: Beacon Press.

Pyke, S. W. & Ricks, F. A. 1972. The counselor and the female client, School Counselor 20(4):280-284.

Randolph, K. S. 1965. The Mature Woman in Doctoral Programs. Unpublished doctoral dissertation, Indiana University.

Report of the Subcommittee on the Status of Academic Women on the Berkeley Campus. 1970.

Ricks, F. A. & Pyke, S. W. 1973. Teacher perceptions and attitudes which foster or maintain sex role differences, *Interchange* 4(1):26-33.

Riesman, D. 1965. Some dilemmas of women's education, *Educational Record* 46:424-434.

Rist, R. C. 1970. Student social class and teacher expectations: The self-fulfilling prophecy in ghetto education, *Harvard Educational Review* 40(3):411-451.

Ruslink, D. H. 1969. *Married Women's Resumption of Education in Preparation for Teaching*. Unpublished doctoral dissertation, New York University.

Russell, P. D. & Snyder, W. V. 1963. Counselor anxiety in relation to amount of clinical experience and quality of affect demonstrated by client, *Journal of Consulting Psychology* 24:358-363.

Saario, T. N., Jacklin, C. N., & Tittle, C. K. 1972. Sex-role stereotyping in the public schools, *Harvard Educational Review* 43(3):386-413.

Sadker, M. & Frazier, N. 1973. *Sexism in School and Society*. New York: Harper & Row.

Sadker, M. & Sadker, D. 1972. Sexual discrimination in the elementary schools, *The National Elementary Principal* 12:41-45.

Safilios-Rothschild, C. 1980 (forthcoming). What parents and educators do. Chapter 10 in *Second Nature: Socialization Is Destiny*, Berkeley, Calif.: University of California Press.

Salpunas, A. 1973. Survey of textbooks detects less bias against Blacks but little to please feminists, *The New York Times*, March 28.

Sells, L. W. 1973. *Sex Differences in Graduate School Survival*. Paper presented at the American Sociological Association Annual Meeting, New York, Aug. 28.

Sexton, P. 1970. How the American boy is feminized, *Psychology Today* 3(8):23-29, 66-67.

Sexton, P. H. 1969. *The Feminized Male*. New York: Random House.

Shaman, J. M. 1971. College admission policies based on sex and the equal protection clause, *Buffalo Law Review* 20(3):609-623.

Shaw, M. C. & White, D. L. 1965. The relationship between child-parent identification and academic underachievement, *Journal of Clinical Psychology* 21:10-13.

Shoulders, J. 1968. *Junior College—An Attraction to Women*. Columbia, Mo.: University of Missouri.

Sikes, J. 1971. *Differential Behavior of Male and Female Teachers*. Unpublished doctoral dissertation, University of Texas at Austin.

Smith, M. P. 1972. He only does it to annoy. In *Sex Differences and Discrimination in Education*. Edited by S. B. Anderson, Worthington, Ohio: Charles A. Jones Publishing Co.

Solmon, L. C. 1974. *Do Women Graduate Students Get a Raw Deal?* Paper presented at the Meetings of the Public Choice Society, New Haven, Conn., March 21.

Spaulding, R. 1963. *Achievement, Creativity, and Self-Concept Correlates of Teacher-Pupil Transactions in Elementary Schools.* Cooperative Research Project No. 1352, Washington, D.C.: U.S. Department of Health, Education, and Welfare, Office of Education.

Stern, R. H. 1976. Review article: Sexism in foreign language textbooks, *Foreign Language Annals* 9(4):294-299.

Strickler, R. W. 1970. *Thomas Coeburn Elementary School Kindergarten—Primary Masculinization Project 1968-72 and Kindergarten-Primary Masculinization Project 1970-71*. Unpublished manuscripts, Penn-Delco School District, Aston, Pa.

Taylor, M. E. 1973. Sex-role stereotypes in children's readers, *Elementary English* 50(7):1045-1047.

Tittle, C. K. 1974. Sex bias in educational measurement: Fact or fiction, *Measurement and Evaluation in Guidance* 6(4):219-226.

Tobias, S. 1971. *Woman as Subject and Object in Higher Education*. Convocation address at Hartford College for Women, Sept. 10.

Tobias, S., Kusnetz, E., & Spitz, D., eds. 1969. *Proceedings of the Cornell Conference on Women*. Ithaca, N.Y.: Cornell University.

Triplett, L. 1968. Elementary education—A man's world?, *The Instructor* 78(3):52.

gh, K. 1973. The relationship of sex of teacher and father presence-absence to academic achievement, Proceedings of the 81st Annual Convention of the American Psychological Association 8:665-666.

Waetjen, W. 1962. Is learning sexless?, Education Digest 28:12-14.

Wall, W. D., Shonell, F. J., & Olson, W. C. 1962. Failure in School: An International Study. Hamburg: UNESCO.

Walster, E., Cleary, T. A., & Clifford, M. M. 1971. The effect of race and sex on college admission, Sociology of Education 44:237-244.

Weitzman et al. 1972. Sex-role socialization in picture book for preschool children, American Journal of Sociology 72:1125-1150.

Werts, C. E. 1968. A comparison of male vs. female college attendance probabilities, Sociology of Education 41(1):103-110.

Werts, C. E. 1966. Sex differences in college attendance, National Merit Scholarship Corporation Research Reports 2(6).

Zimet, G. 1972. What Children Read in School: Critical Analysis of Primary Reading Textbooks. New York: Grune & Stratton.

7. Occupational Sex Discrimination

Acker, J. & Van Houten, D. R. 1974. Differential recruitment and control: The sex structuring of organizations, Administrative Science Quarterly 19(2):211-220.

Athanassiades, J. C. 1974. An investigation of some communication patterns of female subordinates in hierarchical organizations, Human Relations 27(3):195-210.

Bass, B. M. et al. 1971. Male managers' attitudes toward working women, American Behavioral Scientist 15:221-236.

Bryce, R. A. 1970. Characteristics of women holding executive, managerial, and other high level positions in four areas of business, Dissertation Abstracts 30:4216A-4217A.

Campbell, D. P. 1968. The Clash Between Beautiful Women and Science. Paper presented at the American Psychological Association Annual Convention, San Francisco, Aug. 31.

Cecil, E. A., Paul, R. J., & Olins, R. P. 1973. Perceived importance of selected variables used to evaluate male and female job applicants, Personnel Psychology 26:397-404.

Chernik, D. A. & Phelan, J. G. 1974. Attitudes of women in management, International Journal of Social Psychiatry 20(1-2):94.

Coser, R. L. & Rokoff, G. 1971. Women in the occupational world: Social disruption and conflict, Social Problems 18:535-559.

Dinerman, B. 1971. Sex discrimination in academia, Journal of Higher Education 42:253-264.

Epstein, C. F. 1974. The Woman Lawyer. Chicago, Ill.: University of Chicago Press.

Epstein, C. F. 1973. Structuring success for women: Guidelines for gatekeepers, National Association of Women Deans and Counselors Journal 37(1):34-42.

Epstein, C. 1970. Encountering the male establishment: Sex status limits on women's careers in the professions, American Journal of Sociology 75:965-982.

Fidell, L. S. 1970. Empirical verification of sex discrimination in hiring practices in psychology, American Psychologist 25:1094-1098.

Gilmer, B. 1961. Industrial Psychology. New York: McGraw-Hill.

Gould, J. S. & Pagano, A. 1972. Sex discrimination and achievement, National Association of Women Deans and Counselors Journal 35(2):74-82.

Hagen, R. & Kahn, A. 1974. Discrimination Against Competent Women. (Abstract) Unpublished paper, Iowa State University.

Hansen, D. 1974. Sex Differences and Supervision. Paper presented at the American Psychological Association Annual Convention, New Orleans.

Kashket, E. R. et al. 1974. Status of women microbiologisst, Science 183(4124):488-494.

Kay, M. J. 1972. A positive approach to women in management, Personnel Journal 51(1):38-410.

Kelley, H. H. 1967. Attribution theory in social psychology. In Nebraska Symposium on Motivation. Edited by D. Levine, University of Nebraska.

Kronus, C. L. 1971. Women in Librarianship: The Majority Rules? Paper presented at the American Sociological Association Annual Convention, Denver, Colo.

Kronus, C. L. & Grimm, J. W. 1971. Women in Librarianship: The Majority Rules? Paper presented at the Annual Meeting of the Georgia Sociological and Anthropological Association, Athens, Ga.

Landau, E. A. & Dunahoo, K. L. 1971. Sex discrimination in employment: A survey of state and Federal remedies, Drake Law Review 20(9):25-27.

Levitin, T., Quinn, R. P., & Staines, G. L. 1971. Sex discrimination against the American working woman, American Behavioral Scientist 15(2):237-254.

Lipman-Blumen, J. 1973. The Vicarious Achievement Ethic—Non-Traditional Roles for Women. Paper presented at Annual Meeting of the Eastern Sociological Society, New York, April 13-15.

Lublin, J. S. 1972. Discrimination against women in newsrooms: Fact or fantasy, Journalism Quarterly 49(2):357-361.

Lyon, C. & Saario, T. 1973. Women in public education: Sexual discrimination in promotions, Phi Delta Kappan 54(2):15-20.

McCune, S. 1970. Discrimination of women as viewed by female ASTD members, Training Development Journal 24(11):24-36.

McKelvey, J. 1971. Sex and the single arbitrator, Industrial and Labor Relations Review 26(3):335-353.

Miller, J., Labovitz, S., & Fry, L. 1974. Differences in the Organizational Experiences of Women and Men: Resources, Vested Interests, and Discrimination. Paper presented at the American Sociological Annual Convention, Montreal.

Prather, J. 1971. Why can't women be more like men: A summary of the sociopsychological factors hindering women's advancement in the professions, American Behavioral Scientist 15(2):172-182.

Rosen, B. & Jerdee, T. 1974. Effects of applicant's sex and difficulty of job on evaluation of candidates for managerial position, Journal of Applied Psychology 59:511-512.

Safilios-Rothschild, C. 1978. Women and work: Policy implications and prospects for the future. In Women Working. Edited by A. H. Stromberg & S. Harkess, Palo Alto, Calif.: Mayfield Publishing Co.

Safilios-Rothschild, C. 1974. Women and Social Policy. Englewood Cliffs, N.J.: Prentice-Hall.

Schein, V. E. 1973. The relationship between sex role stereotypes and requisite management characteristics, Journal of Applied Psychology 57:95-100.

Simon, R., Clark, S., & Tifft, L. 1966. Of nepotism, marriage and pursuit of an academic career, Sociology of Education 39:344-358.

Simon, R. & Rosenthal, E. 1967. Profile of the woman Ph. D. in economics, history and sociology, Journal of the American Association of University of Women 60:127-29.

Simpson, L. 1970. A myth is better than a miss: Men get the edge in academic employment, College and University Business, February, pp. 72-73.

Smith, R. W. 1972. Covert Discrimination Against Women as Colleagues. Paper presented at the American Psychological Association Annual Convention, Honolulu, September.

Solmon, L. C. 1974. Do Women Graduate Students Get a Raw Deal? Paper presented at the meetings of the Public Choice Society, New Haven, Conn., March.

Solmon, L. C. 1973. Women in doctoral education: Clues and puzzles regarding institutional discrimination, Research in Higher Education 1:299-332.

Terborg, J. R. & Ilgen, D. R. 1974. A Theoretical Approach to Sex Discrimination in Traditionally Masculine Occupations. Paper presented at the American Psychological Association Annual Convention, New Orleans.

Tobias, S. 1971. Psychological and Social Barriers to Women on the Job. Talk delivered to the North Carolina Federation of Business and Professional Women's Clubs, Feb. 20.

Yokopenic, P. A., Bourque, L. B., & Brogan, D. 1974. Professional Communication Networks: A Case Study of Women in the American Public Health Association. Unpublished manuscript, University of California at Los Angeles.

8. The Case of Black Women: Race and Sex Discrimination

Almquist, E. M. 1974. Black Women in the Labor Force: The Experience of a Decade. Department of Sociology, North Texas State University.

Almquist, E. M. 1973. The Income Losses of Working Black Women: Product of Racial and Sexual Discrimination. Paper presented at the American Sociological Association Annual Convention, New York.

Barrett, N. S. & Morgenstern, R. D. 1974. Why do blacks and women have high unemployment rates?, Journal of Human Resources 9(4):452.

Bock, E. W. 1969. Farmer's daughter effect: The case of the Negro female professional, Phylon 30(1):17-26.

Bonney, N. L. 1974. Job Training and the Black Worker: A Case Study and Sociological Critique. Paper presented at the American Sociological Association Annual Convention, Montreal.

Brook, J. S. et al. 1974. Aspiration levels of and for children: Age, sex, race, and socioeconomic correlates, Journal of Genetic Psychology 124:3-16.

Buck, M. & Austrin, H. 1971. Factors related to school achievements in an economically disadvantaged group, Child Development 42:1813-1926.

Charzat, G. 1972. Les Francaises: Sont-Elles des Citoyennes? Paris: Denoel Gonthier.

Epstein, C. F. 1973. Black and female: The double whammy, Psychology Today 7(3):57-61.

Featherman, D. L. 1974. Trends in Occupational Mobility by Race and Sex in the United States, 1962-1972. Paper presented at the Measurement and Models in Stratification and Mobility Research, Toronto, August.

Featherman, D. L. 1972. Achievement orientations and socioeconomic career attainments, American Sociological Review 37:131-143.

Havens, E. 1972. Intergenerational occupational mobility: Comparison of patterns, American Sociological Review 37(6):775-777.

Iglitzin, L. B. 1974. A case study in patriarchal politics: Women on welfare, American Behavioral Scientist 17(4):487-506.

Kim, K. H. 1969. The Social Context of Occupational and Educational Mobility Aspirations of Negro Adolescents. Ph. D. dissertation, University of Maryland. Ann Arbor, Mich.: University Microfilms no. 69-8047.

Micossi. A. [illegible] 1974. Fertility Patterns of Black Women in the Labor Force: Some Tentative Hypotheses. Paper presented at the Pacific Sociological Association, San Jose, Calif.

Presser, H. B. 1971. The timing of the first birth, female roles and black fertility, Milbank Memorial Fund Quarterly 49(3, pt. 1):329.

Ross, S. & Walters, J. 1973. Perceptions of a sample of university men concerning women, Journal of Genetic Psychology 122(2):329-336.

Scott, P. B. 1973. Contemporary and Historical Reflections on the Role of Black Women in the Black Liberationist and Feminist Movements. Unpublished paper.

Simmons, R. G. & Rosenberg, F. R. 1975. Sex, sex roles, and self-image, *Journal of Youth and Adolescence* 4(3):229-258.

Sorkin, A. L. 1972. Education and income of non-white women, *Journal of Negro Education* 14(4):235-244.

Sorkin, A. L. 1971. Occupational status and unemployment of non-white women, *Social Forces* 49(3):393-398.

Turner, B. F. & Turner, C. B. 1974a. Evaluations of women and men among black and white college students, *Sociological Quarterly* 15(3):442-456.

Turner, B. F. & Turner, C. B. 1974b. Race, sex and perception of the occupational opportunity structure among college students, *Sociological Quarterly*. In press.

Virginia Slims American Women's Opinion Poll. 1972. *A Survey of the Attitudes of Women on Their Roles in Politics and the Economy.* Conducted by Louis Harris & Associates, Inc.

Weston, P. J. & Mednick, M. T. 1970. Race, social class, and the motive to avoid success in women, *Journal of Cross-Cultural Psychology* 1(3):284-291.

9. Sex Discrimination: Theory and Research

Almquist, E. 1973. *The Income Losses of Working Black Women: Product of Racial and Sexual Discrimination.* Paper presented at the Annual Meeting of the American Sociological Association, New York.

Banks, W. C. 1974. *Toward an Attributional Model of Prejudice.* Paper presented at the Annual Meeting of the American Psychological Association, New Orleans.

Bass, B. M. et al. 1971. Male managers' attitudes toward working women, *American Behavioral Scientist* 15:221-236.

Benokraitis, N. & Feagin, J. 1974. *Institutional Racism: A Review and Critical Assessment of Literature.* Paper presented at the Annual Meeting of the American Sociological Association, Montreal.

Berens, A. E. 1972. Socialization of need for achievement in boys and girls, *Proceedings of the Annual Convention of the American Psychological Association* 7(pt. 1):273-274.

Berg, K. W. 1969. Schoolbooks and roles of sexes, *Hertha* 5:48-57.

Berkanovic, E. 1973. *Some Implications of Professionalism for Institutional Racism.* Paper presented at the Annual Meeting of the American Sociological Association, New York.

Berkowitz, L. 1961. Anti-Semitism, judgmental processes, and displacement of hostility, *Journal of Abnormal and Social Psychology* 62:210-215.

Blackwell, G. W. 1963. The college and the continuing education of women, *Educational Record* 44:33-39.

Blauner, R. 1972. *Racial Oppression in America.* New York: Harper & Row.

Blum, Z. D. & Coleman, C. S. 1970. *Longitudinal Effects of Education on the Income and Occupational Prestige of Blacks and Whites.* The Johns Hopkins University, The Center for the Study of Social Organization of Schools.

Bock, E. W. 1969. Farmer's daughter effect: The case of the Negro female professionals, *Phylon* 30(1):17-26.

Brophy, J. & Good, T. 1970. Teachers' communication of differential expectations for children's classroom performance: Some behavioral data, *Journal of Educational Psychology* 61:365-374.

Bunting, J. W. 1961. The relation of business to women's higher education, *Educational Record* 42:287-295.

Bunting, M., Graham, P. A., & Wasserman, E. 1961. Academic freedom and incentive for women, *Educational Record* 51:386-391.

Burkey, R. M. 1971. *Racial Discrimination and Public Policy in the United States.* Toronto: D. C. Heath Co.

Butsch, R. J. 1974. *Some Dynamics of Racial Stratification in the United States.* Paper presented at the Annual Meeting of the American Sociological Association, Montreal.

Campbell, M. A. 1973. Why would a girl go into medicine? Monograph. New York.

Caplan, P. J. & Kinsbourne, M. 1974. Sex differences in response to school failure, Journal of Learning Disabilities 7(4):49-52.

Chasen, B. 1974. Sex role stereotyping and pre-kindergarten teachers, Elementary School Journal 74:225-230.

Cless, E. 1969. A modest proposal for the educating of women, American Scholar 38:618-627.

Collard, E. D. 1964. Achievement Motive in the Four-Year-Old Child and Its Relationship to Achievement Expectancies of the Mother. Unpublished Ph. D. dissertation, University of Michigan, Ann Arbor.

Crandall, V. J., Dewey, R., Katkovsky, W., & Preston, A. 1964. Parents' attitudes and behaviors and grade school children's academic achievements, Journal of Genetic Psychology 104:53-66.

Cross, K. P. 1971. The undergraduate women, Research Report No. 5. Washington: American Association for Higher Education.

DeCrow, K. 1972. Look, Jane, look! See Dick run and jump! Admire him! In Sex Differences and Discrimination in Education. Edited by S. Anderson, Worthington, Ohio: Charles A. Jones.

DeFriese, G. & Ford, W. S. 1968. Open occupancy—what whites say, what they do, Transaction 5:53-56.

Dodge, N. J. 1966. Women in the Soviet Economy. Baltimore, Md.: The Johns Hopkins University Press.

Droppleman, L. F. & Schaefer, E. S. 1963. Boys' and girls' reports of maternal and paternal behavior, Journal of Abnormal and Social Psychology 67(6):648-654.

Epstein, C. 1970. Encountering the male establishment: Sex status limits on women's careers in the professions, American Journal of Sociology 75:965-982.

Epstein, C. F. 1973a. Positive effects of the multiple negative: Explaining the success of black professional women, American Journal of Sociology 78:912-935.

Epstein, C. F. 1973b. Structuring success for women: Guidelines for gatekeepers, National Association for Women Deans, Administrators, and Counselors Journal 37:34-42.

Ewald, L. S. 1971. Sex discrimination in higher education: Constitutional equality for women? Journal of Family Law 10(3):327-343.

Feldman, S. D. 1973. Impediment or stimulant: Marital status and graduate, American Journal of Sociology 78:982-994.

Fendrich, J. M. 1967. A study of the association among verbal attitudes, commitment, and overt behavior in different experimental situations, Social Forces 45:347-355.

Fidell, L. S. 1970. Empirical verification of sex discrimination in hiring practices in psychology, American Psychologist 25:1094-1098.

Flanagan, J. C. 1966. Quality education for girls, Women's Education 5(4):1-7.

Frank, H. April 1975. The Socialization of Freshwomen Medical Students. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, D.C., April.

Frank, H. H. & Wolman, C. 1973. Gender deviancy in male peer groups, Proceedings of the 81st Annual Convention of the American Psychological Association 8:1067-1068.

Frazier, N. & Sadker, M. 1973. Sexism in School and Society. New York: Harper & Row.

Fredriksson, I. 1969. Konstroller i Larobocker. Stockholm: Swedish Joint Female Labour Council.

Garai, J. & Schienfeld, M. 1968. Sex differences in mental and behavioral traits, Genetic Psychological Monographs 77:169-299.

Gilmer, B. 1961. Industrial Psychology. New York: McGraw-Hill.

Goldberg, M. P. 1972. Women in Soviet economy, The Review of Radical Political Economics 4(3):60-74.

Goldberg, S. & Lewis, M. 1969. Play behavior in the year-old infant: Early sex differences, Child Development 40:21-31.

Good, T. & Grouwns, D. 1972. Reaction of male and female teacher trainees to descriptions of elementary school pupils, Technical Report No. 62. Center for Research in Social Behavior, University of Missouri at Columbia.

Good, T. L., Sikes, J., & Brophy, J. 1973. Effects of teacher sex and student sex on classroom interaction, Journal of Educational Psychology 65(1):74-87.

Grambs, J. & Waetjen, W. 1966. Being equally different: A new right for boys and girls, National Elementary Principal 46:59-67.

Hagen, R. & Kahn, A. 1974. Discrimination Against Competent Women. (Abstract) Unpublished paper, Iowa State University, Ames.

Harbeson, G. E. 1971. Choice and Challenge for the American Women. Cambridge, Mass.: Schenkman Publishing Co., Inc.

Harris, A. S. 1970. The second sex in academia, American Association of University Professors Bulletin 56:283-295.

Hatfield, J. S., Ferguson, L. R., & Alpert, R. 1967. Mother child interaction and the socialization process, Child Development 38:365-414.

Hembrough, B. 1966. A two-fold educational challenge: The student wife and the mature woman student, National Association of Women Deans, Administrators and Counselors 29:163-167.

Hetherington, E. M. 1967. The effect of familial variables on sex typing, on parent-child similarity, and on imitation in children. In Minnesota Symposium on Child Psychology, vol. I. Edited by J. P. Hill, Minneapolis: The University of Minnesota Press, pp. 82-107.

Hoffman, L. W. 1975. Early Childhood Experiences and Women's Achievement Motives. Unpublished doctoral dissertation, University of Michigan, Ann Arbor.

Hraba, J. & Braito, R. 1974. Social Formation of Consciousness of Kind: and Class. Paper presented at the Annual Meeting of the American Sociological Association, Montreal.

Hunter, T. 1967. The status of women in Australia, Indian Journal of Social Work 28(2):161-167.

Johnstone, J. & Rivera, R. 1965. Volunteers for Learning. Chicago: Aldine.

Kashket, E. R. et al. 1974. Status of women microbiologists, Science 183(4124):488-494.

Kay, M. J. 1972. A positive approach to women in management, Personnel Journal 51(1):38-41.

Kronus, C. L. & Grimm. 1971. Women in Librarianship: The Majority Rules? Paper presented at the Annual Meeting of the American Sociological Association, Denver.

Lee, P. C. 1973. The early classroom experience: Masculine or feminine?, Perspectives on Education 6:10-15.

Levitin, T., Quinn, R. P., & Staines, G. L. 1971. Sex discrimination against the American working woman, American Behavioral Scientist 15(2):237-254.

Levy, B. & Stacey, J. 1973. Sexism in the elementary school: A backward and forward look, Phi Delta Kappan 55:105-109.

Lewis, M. 1972. State as an infant-environment interaction: An analysis of mother-infant behavior as a functioning of sex, Merrill-Palmer Quarterly 18:95-121.

Linn, L. S. 1965. Verbal attitudes and overt behavior: A study of racial discrimination, Social Forces 43:353-364.

Lippitt, R. & Gold, M. 1959. Classroom social structure as a mental health problem, Journal of Social Issues 15(1):40-49.

Litton-Fox, G. 1973. Nice Girl: The Behavioral Legacy of a Value Construct. Paper presented at the National Council on Family Relations, Toronto, October.

Lord, M. E. M. 1968. Mature Women and the Degree of Doctor of Philosophy. Unpublished doctoral dissertation, University of Wisconsin.

Ludeman, W. W. 1961. Declining female college attendance: Causes and implications, Educational Forum 25:505-507.

Lynn, D. B. & Sawrey, W. L. 1962. Sex differences in the personality development of Norwegian children, Journal of Genetic Psychology 101:367-374.

Lyon, C. & Saario, T. 1973. Women in public education: Sexual discrimination in promotions, Phi Delta Kappan 54(2):15-20.

Lyon, R. 1964. Married women and the academic tradition, Journal of Higher Education 35:251-255.

McBee, L. & Suddick, E. D. 1974. Differential freshman admission by sex, National Association for Women Deans, Administrators and Counselors Journal 37(2):75-77.

McCune, S. 1970. Discrimination of women as viewed by female ASTD members, Training Development Journal 23(11):24-36.

Merton, R. K. 1949. Discrimination and the American greed. In Discrimination and National Welfare. Edited by R. M. Macburg, New York: Harper.

Miller, J., Labovitz, S., & Fry, L. 1974. Differences in the Organizational Experiences of Women and Men: Resources, Vested Interests, and Discrimination. Paper presented at the Annual Meeting of the American Sociological Association, Montreal.

Moss, H. A. 1967. Sex age and state as determinant of mother-infant interaction, Merrill-Palmer Quarterly 13:19-36.

Moss, H. A., Robson, K. S., & Pedersen, F. 1969. Determinants of material stimulation of infants and consequences of treatment for later reactions to strangers, Developmental Psychology 1:239-246.

Myers, G. 1964. Labor force participation of suburban mothers, Journal of Marriage and the Family 28(3):306-311.

Osofsky, J. D. & O'Connell, E. J. 1972. Parent-child interaction: Daughter's effects upon mothers' and fathers' behaviors, Developmental Psychology 7(2):157-168.

Phelps, M. W. 1972. Does sex make a difference?, College and University 48:90-91.

Pullen, D. L. 1972. The educational establishment: Wasted women. In Voices of the New Feminism. Boston: Beacon Press.

Randolph, K. S. 1965. The Mature Woman in Doctoral Programs. Unpublished doctoral dissertation, Indiana University.

Riesman, D. 1965. Some dilemmas of women's education, Educational Record 46:424-434.

Rose, A. M. 1956. Intergroup relations United States prejudice: Pertinent theory for the study of social change, Social Problems 4:173-176.

Rosen, B. & Jerdee, T. H. 1974. Influence of sex role stereotypes on personnel decisions, Journal of Applied Psychology 59:9-14.

Ruslink, D. H. 1969. Married Women's Resumption of Education in Preparation for Teaching. Unpublished doctoral dissertation, New York University.

Saario, T. N., Nagy, C. & Title, C. 1973. Sex role stereotyping in the public schools, Harvard Educational Review 43:386-413.

Sadker, M. & Sadker, D. 1972. Sexual discrimination in the elementary schools, The National Elementary Principal 52:41-45.

Safilios-Rothschild, C. 1974a. Women and Social Policy. Englewood Cliffs, N.J.: Prentice-Hall.

Safilios-Rothschild, C. 1974b. Development of Models for Understanding the Processes Involved in Sex Discrimination. National Institute of Education Contract NIE-C-74-0139.

Safilios-Rothschild, C. 1972a. The options of Greek men and women, Sociological Focus 5(2):71-83.

Safilios-Rothschild, C. 1972b. Toward a Sociology of Women. Lexington, Mass.: Xerox College Publishing.

Sells, L. 1973. Sex Differences in Graduate School Survival. Paper presented at the Annual Meeting of the American Sociological Association, New York.

Shaman, J. M. 1971. College admissions policies based on sex and the equal protection clause, Buffalo Law Review 20(3):609-623.

Shoulders, J. 1968. Junior College—An Attraction to Women. Columbia, Mo.: University of Missouri.

Simpson, L. 1970. A myth is better than a miss: Men get the edge in academic employment, College and University Business 48:72-73.

Simpson, G. E. & Yinger, J. M. 1958. Racial and Cultural Minorities. New York: Harper.

Sokolowska, M. 1965. Some reflections on the different attitudes of men and women toward work, International Labor Review 92:35-50.

Solmon, L. 1974. Do Women Graduate Students Get a Raw Deal? Paper presented at the Meeting of the Public Choice Society, March 21.

Sorkin, A. L. 1972. Education, occupation, and income of nonwhite women, Journal of Negro Education 41(4):343-351.

Stacey, J., Berand, S., & Daniels, J., eds. 1974. And Jill Came Tumbling After: Sexism in American Education. New York: Dell.

Statistical Yearbook of Greece. 1973. National Statistical Service of Greece, Athens.

Stein, A. & Bailey, M. M. 1973. The socialization of achievement orientation in females, Psychological Bulletin 80(5):345-366.

Taylor, M. E. 1973. Sex role stereotypes in children's readers, Elementary English 50(7):1045-1047.

Terborg, J. R. & Ilgen, D. R. 1974. A Theoretical Approach to Sex Discrimination in Traditionally Masculine Occupations. Paper presented at the Annual Meeting of the American Psychological Association, New Orleans.

Walster, E., Cleary, T. A., & Clifford, M. M. 1971. The effect of race and sex on college admission, Sociology of Education 44:237-244.

Warner, L. G. & Dennis, R. 1971. Prejudice versus discrimination: An empirical example and theoretical extension, Social Forces 48(4):473-484.

Wellman, B. 1971. Social identities in black and white, Sociological Inquiry 41:57-66.

Werts, C. E. 1966. Sex differences in college attendance, National Merit Scholarship Corporation Research Report 2(6):11.

Westie, F. R. 1964. Race and ethnic relations. In Handbook of Modern Sociology. Edited by R. E. Faris, Chicago: Rand McNally, pp. 576-619.

Yokopenic, P. A., Bourque, L. B., & Brogan, D. 1974. Professional Communication Networks: A Case Study of Women in the American Public Health Association. Unpublished manuscript, University of California, Los Angeles.

10. Sex and Other Stratification Systems

Alexander, K. L. & Eckland, B. K. 1974. Sex differences in the educational attainment process, American Sociological Review 39:668-682.

Amundsen, K. 1974. Social Policy Issues Affecting Women's Political Roles. Paper presented at the American Association for the Advancement of Science Annual Convention in the section on Science and Public Policy, San Francisco, Feb. 25.

Amundsen, K. 1971. The Silenced Majority. New York: Prentice-Hall.

Andreas, C. 1971. Sex and Caste in America. Englewood Cliffs, N.J.: Prentice-Hall.

Archibald, K. 1970. Sex and the Public Service. Ottawa: Queen's Printer.

Bart, P. B. 1969. Why women's status changes in middle age: The turns of the social ferris wheel, Sociological Symposium 3:1-18.

Benston, M. 1969. The political economy of women's liberation, Monthly Review 21(4).

Berreman, G. D. 1972. Race, caste, and other invidious distinctions in social stratification, RACE 13(4):385-414.

Blankenship, W. C. 1967. Head librarians: How many men: How many women, College and Research Libraries News 28(1):41-48.

Blau, P. M. & Duncan, O. D. 1967. The American Occupational Structure. New York: John Wiley and Sons.

Blum, Z. D. & Coleman, C. S. 1970. Longitudinal Effects of Education on the Income and Occupational Prestige of Blacks and Whites. Baltimore, Md.: The Johns Hopkins University, The Center for the Study of Social Organization of Schools.

Bose, C. E. 1973. Jobs and Gender: Sex and Occupational Prestige. Baltimore, Md.: The Johns Hopkins University Center for Metropolitan Planning and Research, Shriver Hall, Homewood Campus.

Collins, R. 1971. A conflict theory of sexual stratification, Social Problems 1:4-21.

Deck, L. 1971. Short workers of the world unite, Psychology Today, August, p. 102.

Dijkers, M. P. J. M. 1978 (forthcoming). The Social Standing of Individuals and Families: An Empirical Investigation. Unpublished doctoral dissertation, Wayne State University, Detroit, Mich.

Eichler, M. 1974. The Double Standard as an Indicator of Sex Status Differentials. Paper presented at the Annual Meeting of the Sociological Association, Montreal.

Eichler, M. 1973a. An annotated selected bibliography of bibliographies on women. In Women in Canada. Edited by M. L. Stephenson, Toronto: New Press, pp. 291-331.

Eichler, M. 1973b. Women as personal dependents. In Women in Canada. Edited by M. L. Stephenson, Toronto: New Press, pp. 36-55.

Epstein, C. F. 1973. Positive effects of the multiple negative: Explaining the success of black professional women, American Journal of Sociology 78:912-935.

Epstein, C. F. 1972. Bringing Women in: Rewards, Punishment, and the Structure Achievement. Paper presented at the New York Academy of Sciences Conference on Successful Women in the Sciences and Analysis of Determinants, May 12.

Feldman, S. D. 1971. The Presentation of Shortness in Everyday Life—Height and Heightism in American Society: Toward a Sociology of Stature. Paper presented at the Annual Meeting of the American Sociological Association, Denver.

Gross, E. 1967. Plus a change?. . . The sexual structure of occupations over time, Social Problems 16:198-208.

Hacker, H. 1951. Women as a minority group, Social Forces, April.

Handbook on Women Workers. 1975. Washington, D.C.: U.S. Department of Labor, Women's Bureau, Employment and Standards Administration.

Harbeson, G. E. 1971. Choice and Challenge for the American Woman. Cambridge, Mass.: Schenkman Publishing Co., Inc.

Harnett, J. J., Bailey, K. G., & Hartley, C. S. 1974. Body height, position and sex as determinants of personal space, The Journal of Psychology 87:129-136.

Hicks, R. E. 1969. The relationship of sex to occupational prestige in an African country, Personnel and Guidance Journal 47(7):665-670.

Hraba, J. & Braito, R. 1974. Social Formation of Consciousness of Kind: Race, Sex and Class. Paper presented at the Annual Meeting of the American Sociological Association, Montreal.

Jochimsen, L. 1969. Frauen in der Bundesrepublik: Die Mehrheit, die sich wie eine minderheit Verhalt, Kursbuch 17.

Judek, S. 1968. Woman in the Public Service: Their Utilization and Employment. Economics and Research Branch, Canada Department of Labour.

Kincade-Oppenheimer, V. 1968. Sex-labeling of jobs, Industrial Relations, May, pp. 219-234.

Kleck, R. E. 1970. Interaction distance and nonverbal agreeing responses, British Journal of Sociology and Clinical Psychology 9:180-182.

Laufer, R. S. & Bengtson, V. L. 1974. Generations and Social Stratification in Advanced Industrial Society. Paper presented at the Annual Meeting of the American Sociological Association, Montreal.

Lenski, G. 1966. Power and Privilege: A Theory of Social Stratification. New York: McGraw-Hill.

Lieberson, S. 1970. Stratification and ethnic groups, Sociological Inquiry 40:172-181.

Lipman-Blumen, J. 1972. How ideology shapes women's lives, Scientific American 226(1):34-42.

Magarrell, M. 1978. Women account for 93 percent of enrollment gain, Chronicle of Higher Education 15(17):1.

Martin, W. T. & Poston, D. L. 1972. The occupational composition of white females: Sexism, racism and occupational differentiation, Social Forces 50(3):349-355.

Milgram, S. 1965. Some conditions of obedience and disobedience to authority, Human Relations 18:57-77.

Millet, K. 1970. Sexual Politics. Garden City, N.Y.: Doubleday and Co., Inc.

Myrdal, G. 1944. An American dilemma. In The Negro Problem and Modern Democracy. New York, London: Harper and Brothers.

Nilson, L. B. 1976. The occupational and sex related components of social standing, Sociology and Social Research 60(3):328-336.

Nilson, L. B. 1972. Toward a Status-Attainment Model for Women: The Occupational Components of a Woman's Social Standing. Unpublished paper, Department of Sociology, University of Wisconsin, Madison.

Nuthall, G. A. 1969. Research note: Sex in differences in ratings of the occupational status of teaching, New Zealand Journal of Educational Studies 4(2):170-176.

Runciman, W. G. 1972. Race and social stratification, RACE 13(4):497-509.

Safilios-Rothschild, C. 1978. Women and modern society. In Encyclopedia of Social Sciences. Princeton, N.J.: Arete Publishing Co.

Safilios-Rothschild, C. 1977a. Love, Sex, and Sex Roles. Englewood Cliffs, N.J.: Prentice-Hall.

Safilios-Rothschild, C. 1977b. Sexuality, power, and freedom among "older" women. In The Aging Women. Edited by L. Troll, J. Israel, & K. Israel, Englewood Cliffs, N.J.: Spectrum Books, Prentice-Hall.

Safilios-Rothschild, C. 1976. A macro-and micro-examination of family power and love: An exchange model, Journal of Marriage and the Family, vol. 38, no. 2.

Safilios-Rothschild, C. 1975. Family and stratification: Some macrosociological observations and hypotheses, Journal of Marriage and the Family 37:855-860.

Safilios-Rothschild, C. 1974. Women and Social Policy. Englewood Cliffs, N.J.: Prentice-Hall.

Sewell, W. H. & Shaw, V. 1968. Parents' education and children's educational aspirations and achievements, American Sociological Review 33(2):191-209.

Sewell, W. H. & Shaw, V. 1967. Socio-economic status, intelligence and the attainment of higher education, Sociology of Education 40:1-23.

Stefflre, B. et al. 1968. The relationship of sex to occupational prestige, Personnel and Guidance Journal 46(8):765-772.

Touhey, J. C. 1974. Effects of additional women professionals on ratings of occupational prestige, Journal of Personality and Social Psychology 29(1):86-89.

Van der Burghe, P. L. 1967. Race and Racism. New York: John Wiley & Sons.

Walker, C. A. & Bradley, D. S. 1973. Women and Occupational Prestige. Paper presented at the Annual Meeting of the American Sociological Association, New York.

Watson, W. B. & Barth, E. A. 1964. Questionable assumptions in the theory of social stratification, Pacific Sociological Review 7:10-16.

Wellman, B. 1971. Social identities in black and white, Sociological Inquiry 41:57-66.

11. Sex Role Stereotypes: Are They Changing and How Much?

Ahdab-Yehia, M. 1975. Attitudes Toward Women's Work Commitment: Changes From 1964-1974. Unpublished doctoral dissertation, Wayne State University, Detroit, Mich.

Axelson, L. J. 1963. The marital adjustment and marital role definitions of husbands of working and non-working wives, Marriage and Family Living 25(2):189-195.

Ball-Rokeach, S. J. 1976. Receptivity to sexual equality, *Pacific-Sociological Review* 19(4):519-540.

Bayer, A. E. 1975. Sexist students in American colleges: A descriptive note, *Journal of Marriage and the Family* 37(2):391-397.

Block, J. H. 1973. Conceptions of sex role: Some cross-cultural and longitudinal perspectives, *American Psychologist* 28(6):512-526.

Boyd, M. 1974. *Equality Between the Sexes: The Results of Canadian Gallup Polls, 1953-1973.* Paper presented at the Canadian Sociology and Anthropology Association, Aug. 25.

Braito, R. & Powers, E. A. 1972. *What the Other Half Thinks: The Implications of Female Perceptions for Work Demands.* Ames, Iowa: Industrial Relations Center, Iowa State University.

Broverman, I. K., Broverman, D. M., Clarkson, F. E., Rosenkrantz, P. S., & Vogel, S. R. 1970. Sex-role stereotypes and clinical judgments of mental health, *Journal of Consulting and Clinical Psychology* 34:1-7.

Campbell, D. P. & Soliman, A. M. 1967. *The Vocational Interests of Women in Psychology.* Paper presented at the Midwestern Psychological Association Meetings, Chicago, 5 May.

Cummings, L. D. 1977. *Opposition and Support for Alternative Types of Families: Feminism and Value Stretch Among College Men.* Paper presented at the Eastern Sociological Association Meeting, New York.

Deutsch, C. J. & Gilbert, L. A. 1976. Sex role stereotypes: Effect of perceptions of self and others on personal adjustment, *Journal of Counseling Psychology* 23:373-379.

Dijkers, M. P. J. M. 1978. *The Social Standing of Individuals and Families: An Empirical Investigation.* Unpublished Ph. D. dissertation, Wayne State University, Detroit, Mich.

Ellis, L. J. & Bentler, P. M. 1973. Traditional sex-determined role standards and sex stereotypes, *Journal of Personality and Social Psychology* 25(1):28-34.

Elman, J. et al. 1970. Sex-roles and self concepts: Real and ideal, *Proceedings of the Annual Convention of the American Psychological Association* 5(pt. 1):455-456.

Entwisle, D. R. & Greenberger, E. 1972. Adolescents' views of women's work role, *American Journal of Orthopsychiatry* 42(4):648-656.

Farrell, W. 1975. *The Liberated Man.* New York: Bantam.

Ferdinand, T. N. 1964. Psychological femininity and political liberalism, *Sociometry* 27(1):75-87.

Frieze, I. H. 1974. *Changing Self-Images and Sex Role Stereotypes in College Women.* Paper presented at the American Psychological Association Annual Convention, New Orleans.

Garland, T. N. 1970. *The Better Half: The Male in the Dual Profession Family.* Paper presented at the American Sociological Association Annual Convention, Washington, D.C.

Glazer-Malbin, N. 1974. *How Women Think About Women: Social Correlates of Attitudes Relevant to the Women's Movement.* Paper presented at the Society for the Study of Social Problems, Montreal.

Hawley, P. 1972. Perceptions of male models of femininity related to career choice, *Journal of Counseling Psychology* 19(4):308-313.

Herman, M. H. & Sedlacek, W. E. 1973. Sexist attitudes among male university students, *Journal of College Student Personnel* 14(6): 544-548.

Hoffman, L. W. 1974. Effects of maternal employment on the child: A review of the research, *Developmental Psychology* 10:204-228.

Huang, L. J. 1971. Sex role stereotypes and self concepts among American and Chinese students, *Journal of Comparative Family Studies* 2(2):215-234.

Joesting, J. & Joesting, R. 1973. Equalitarianism and creativity: A tentative relationship, *Psychological Reports* 32(3, pt. 2):1125-1126.

Johnson, K. P. 1969. The factors associated with the male's tendency to negatively stereotype the female, *Sociological Focus* 2(3):21-39.

Johnson, M. et al. 1974. *Expressiveness Re-Evaluated.* Paper presented at the American Sociological Association Annual Convention, Montreal.

Kammeyer, K. 1964. Feminine role: An analysis of attitude consistency, Journal of Marriage and the Family 26(3):295-305.

Kaplan, R. M. & Goldman, R. D. 1973. Stereotypes of college students toward the average man's and woman's attitude toward women, Journal of Counseling Psychology 20(5): 459-462.

Komarovsky, M. Dilemmas of Masculinity. New York: W.W. Norton and Co.

Lipman-Blumen, J. 1972. How ideology shapes women's lives, Scientific American 226(1): 34-42.

Lunneborg, P. W. 1970. Stereotypic aspects in masculinity-femininity measurement, Journal of Consulting and Clinical Psychology 34:113-118.

Mason, K. O. 1973. Studying Change in Sex-Role Definitions via Attitude Data, Proceedings of the American Statistical Association, Social Statistics Section, pp. 138-141.

Mason, K. O. & Bumpass, L. L. 1974. U.S. women's sex-role ideology, 1970. American Journal of Sociology. In press.

Meir, H. C. 1971. Mother-Centeredness and College Youth's Attitudes Toward Social Equality for Women: Some Empirical Findings. Paper presented at the American Sociological Association Annual Convention, Denver.

Morris, M. B. 1974. I Enjoy Being a Girl: The Persistence of Stereotypic Views of Sex Roles. Paper presented at the American Sociological Association Annual Convention, Montreal.

Neufeld, E., Langmeyer, D., & Seeman, W. 1974. Some sex role stereotypes and personal preferences, Journal of Personality Assessment 38(3):247-254.

Orcutt, J. D. & Inmon, R. R. 1974. The Impact of Student Activism on Female Sex-Role Attitudes: Longitudinal and Cross-Sectional Perspectives. Paper presented at the American Sociological Association Annual Convention, Montreal.

Osmond, M. W. & Martin, P. Y. 1975. An Operationalization of Dyadic Exchange: Toward a General Model. Paper presented at the American Sociological Association Annual Convention, Montreal.

Parelius, A. P. 1974. Emerging Sex-Role Attitudes, Expectations, and Strains Among College Women. Paper presented at the Society for the Study of Social Problems Annual Convention, Montreal.

Polk, B. & Stein, R. 1972. Roles, Norms and Stereotypes. Unpublished paper.

Poloma, M. M. 1970. The Myth of the Equalitarian Family: Familial Roles and the Professionally Employed Wife. Paper presented at the American Sociological Association Annual Convention, Washington, D.C.

Rosenkrantz, P. 1968. Sex-role stereotypes and self-concepts in college students, Journal of Consulting and Clinical Psychology 32:287-295.

Ross, S. & Walters, J. 1973. Perceptions of a sample of university men concerning women, Journal of Genetic Psychology 122(2):329-336.

Rossi, A. S. 1964. Will science change marriage?, Saturday Review, Dec. 5, pp. 75-77.

Safilios-Rothschild, C. 1974. Women and Social Policy. Englewood Cliffs, N.J.: Prentice-Hall.

Safilios-Rothschild, C. 1972. The options of Greek men and women, Sociological Focus 5(2):71-83.

Safilios-Rothschild, C. 1971. A cross-cultural study of women's marital, educational and occupational options, Acta Sociologica 14(1-2):96-113.

Steinman, A. & Fox, D. J. 1966. Male-female perceptions of the female role in the United States, Journal of Psychology 64:265-276.

Tavris, C. 1973. Who lives women's liberation—and why: The case of the unliberated liberals, Journal of Social Issues 29(4):175-198.

Turner, B. F. 1974. Socialization and career orientation among black and white college women, Journal of Vocational Behavior 5:307-319.

Turner, B. F. & Turner, C. B. 1974. Race and Sex Differences in Evaluating Women. Unpublished paper, University of Massachusetts.

Unger, R. & Siiter, R. 1974. Sex-Role Stereotypes: The Weight of a "Grain of Truth." Paper presented at the Eastern Psychological Association Annual Convention, Philadelphia, Pa., April.

Virginia Slims American Women's Opinion Poll. 1972. A Survey of the Attitudes of Women on Their Roles in Politics and the Economy. Conducted by Louis Harris and Associates, Inc.

Vogel, S. R. et al. 1974. Sex-role self-concepts and life style, Journal of Consulting and Clinical Psychology. In press.

☆U.S. GOVERNMENT PRINTING OFFICE: 1979-631-590/2911